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THE EDUCATIONAL WORK OF THE WORCESTER MUSEUMS

by

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CHAPTER I

INTRODUCTION

Besides its universities and colleges, the city of Worcester, with a population numbering about two hundred thousand, is fortunate in having other facilities for learning in its museums.

STATEMENT OF THE PROBLEM

Since there has been evidence of educational work in the museums of the city of Worcester, it was the purpose of this study to report the educational activities carried on in the Worcester museums.

WORCESTER MUSEUMS

American Antiquarian Society

Worcester Natural History Society

Worcester Historical Society

Worcester Art Museum

American Steel and Wire Company, Industrial Museum

Crompton and Knowles Museum

Norton Hall Museum

John Woodman Higgins Steel Museum

DESCRIPTION OF WORCESTER MUSEUMS

The American Antiquarian Society¹ located at the corner of Salisbury Street and Park Avenue is a national library of American history. Everything concerning the history of America, of a literary, religious, dramatic, economic or political nature is preserved here. The Society has three-quarters of a million volumes, nearly a quarter of a million pictures, engravings, and portraits, all arranged by name or subject matter.

The Worcester Natural History Society located at twelve State Street embraces nearly all of the fields of natural history. It maintains an extensive collection of birds and local wild life, some of which are exhibited in their natural setting; of bird skins; of native fish; of minerals; and of sea shells. The museum has a well-stocked reference library and a children's circulating library.

The Worcester Historical Society is located at thirty-nine Salisbury Street. Its library contains over fifty thousand bound volumes and pamphlets, besides a well organized collection of over twenty thousand manuscripts, maps, broadsides,

¹Article in the Worcester Sunday Telegram, January 21, 1945.

and newspapers. The newspaper clippings run far back of the date of the Society's beginnings, and serve an important purpose in recording Worcester history. There is also an extensive bibliography of magazine and newspaper articles, books, and manuscript records relating to the American Indians.¹

The Museum contains many thousands of objects and pictures of historical significance, and actual tools, toys, clothing, ornaments, home utensils, works of domestic utility and art showing the way in which Worcester city and county have worked, played, loved and grown in population, influence and aspiration.

The museum is open to the public every afternoon, without charge, from two to five o'clock, except Sundays, Mondays, and holidays.

The Worcester Art Museum at fifty-five Salisbury Street has art objects from all parts of the world and these include paintings in every possible media, sculpture, frescoes, silverware, ceramics, crafts, and tapestries.

The School of the Worcester Art Museum is located in quarters in the Museum building. Courses include general instruction in fine and commercial art, and training in painting

¹Bulletin of the Worcester Historical Society 1944.

and drawing, techniques of painting, composition, sketching, sculpture and design. A certificate is given upon the satisfactory completion of three years' work and students desiring a degree in teaching are accepted at Clark University, Worcester State Teachers College, or the Massachusetts School of Art in Boston.

The museum also has a collection of lantern slides, photographs and records (music), and a library containing more than sixteen thousand volumes and pamphlets relating to art subjects.

The museum is open daily from ten o'clock in the morning to five o'clock in the afternoon, and on Sunday afternoons from two to six o'clock.

The American Steel and Wire Company, Industrial Museum, formerly housed on Grove and Faraday Streets, was presented to the Worcester Natural History Society in 1944. At the present time four or five models are on display at this museum. The rest of the exhibit will remain in storage until adequate facilities for its display are available.

The exhibit includes wire products and wire mill equipment; scale models, showing the technical advances and development of the steel wire industry from its earliest period to the present day; related pictures, manuscripts, and printed

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records, pertaining to plant and personnel.¹

The Crompton and Knowles Museum² at ninety-three Grand Street contains utensils and original patent models showing the early methods of hand weaving and the contributions of the company to the development of textile machinery. Included are pictures and documentary records of the company's history, and samples of fibres from the raw to the finished state. The Museum library has about five hundred books dealing with English and French textile machinery patents. The museum is open during business hours.

The Norton Hall Museum³ is located at one New Bond Street, and has on exhibition the company's products in different stages of manufacture. Samples of raw materials, and ores in successive states of purification are displayed, as well as the products resulting from the different processes of manufacture.

Mural paintings show scenes at the mines, and portray operations at the plant. Other exhibits trace the company's history through documents, pictures, clippings, and personal memorabilia of company executives and workers.

¹Coleman, Lawrence Vail, Company Museums, Baltimore, Maryland: Waverly Press, Inc., 1943, pp. 112-113.

²Ibid., p. 114.

³Ibid., p. 115.

The John Woodman Higgins Steel Museum¹ at one hundred Barber Avenue, has sheet metal products of all ages on display. Included are primitive weapons and utensils; medieval steel arms, armor, and tools; one hundred ten suits of fifteenth and sixteenth century body armor; sculpture; tapestries; and paintings of armorial subjects. Modern pressed-steel products, include automobile and airplane parts; dies and punches; specimens of iron ore, raw steel and steel alloys.

The museum library contains reference books and illustrations of medieval and modern iron and steel products.

The museum is open weekdays, with the exception of Saturday afternoons and holidays from eight thirty o'clock in the morning to five-thirty o'clock in the afternoon.

¹Ibid., pp. 115-116.

CHAPTER II

REVIEW OF LITERATURE AND RESEARCH

In his report for the United States Commissioner of Education, Paul M. Rea¹ stated that the phenomenal development of museums from 1888 to 1913 was due to the introduction of educational work. He predicted that educational and extension work of museums was not a fad but a permanent addition to education.

Up to 1913 only a small proportion of public museums were awake to the possibilities of educational work and school authorities were not fully aware of its advantages. He believed that there was a need for closer cooperation between educators and museum educational work.

Ramsey² found in her study of the Development, Methods, and Trends of Educational Work in Museums of the United States that definite attempts had been made by museums in various sections of the country to carry on organized educational work with adults, but that in no instance had the maximum educational value of the museum been realized.

¹Ramsey, Grace Fisher, "The Development, Methods, and Trends of Educational Work in Museums of the United States." Unpublished Doctor's Thesis, New York University, 1938, pp. 26-27.

²Ibid., p. 58.

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In answer to a questionnaire mailed out to two hundred museums in the United States, Ramsey¹ found the following reasons were given for installing educational programs:

1. To make the museum and its collection of greater service to the community.
2. To be a vital center of education in the community.
3. To fulfill the purpose for which many museums were established - the education of its citizens.
4. To help the schools through visual aids.
5. To give cultural advantages.
6. To increase interest in natural history and art appreciation.
7. To increase museum attendance.
8. To fill a need in the life of the community through museum education.

According to Powell,² the primary aims of the museums were to collect and house objects, and to arrange and exhibit them. No conscious effort was made to attract the public, since the scholar student and connoisseur would visit the museum in any event. It was not until the museums realized their duty was the making of their collections intelligible,

¹Ibid., pp. 23-24.

²Powell, Lydia, The Art Museum Comes to the School, New York: Harper and Brothers, 1944, pp. 10-11.

useful, and enjoyable to a wide public that education became a museum function. This awakening led to the organization of the educational work carried on in the most active American museums today.

That museums are meeting a very definite need is evidenced by the ever-increasing numbers of people who attend gallery talks. Huger¹ believes it is the duty of the museum to offer the visitor some information concerning the religious, political, artistic, or other trends that give character to a particular piece of work.

Coleman² states that a quarter century ago the educational ideal had no actual backing, but the volume of museum educational work today is very great. This is due largely to the practical methods that have been brought out through trial and discussion, and the critical studies which have been made of the most pressing needs for further effort with both young and old. By simplifying their methods, museum workers are answering a demand for more extensive work with children, and are reaching greater numbers directly and through the schools. A visible transformation through the improvement of display

¹Huger, Elliott, "Educational Activities in Museums of Art," Fortieth Yearbook of the National Society for the Study of Education, Bloomington, Illinois: Public School Publishing Company, 1941, p. 685.

²Coleman, Laurence Vail, The Museum in America, Baltimore, Maryland: Waverly Press, Inc., 1931, pp. 4-5.

was made in museums with the adoption of period settings in art and history, of habitat groups in science, and of action exhibits in industry museums.

Cartwright¹ compares museums to fairs with both relying largely upon visual methods. Both attempt to tell something graphically. Many museums owe their origin to fairs or expositions. The main difference between the educational effect of a museum exhibit and that of a world's fair exhibit lies in the fact that the former is of a stationery rather than an ephemeral nature and provides the public with a continuing process of educational enrichment. He states that the public school, the library, and the museum are the only three "institutional agencies for adult education" and that provisions should be made for keeping the museum open so that adults who are employed during the museum's visiting hours may have an opportunity to participate in its educational activities.

In her study, Starbird² claims that museums play an important role in raising standards in the arts by preserving

¹Cartwright, Morse A. "The Place of the Museum in Adult Education" Fortieth Yearbook of the National Society for the Study of Education, Bloomington, Illinois, Public School Publishing Co., 1941, pp. 683-685.

²Starbird, Pearl "Field Trips in Art in Greater Boston." Unpublished Master's thesis, Boston University, Boston, Mass.: 1933, pp. 5, 7.

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for the world the works of all the ages. Knowledge of the best arts of other nations, and the contributions made by our own country are necessary for the development of full understanding and power of the student. A truer American art can be produced through a knowledge and appreciation of the works of other countries.

The museum became an educational institution with increased responsibilities and enlarged possibilities in the later years of the nineteenth century, when it was found that merely displaying objects was not enough.¹ It was necessary to interpret the collections as well. Two viewpoints on the function of a museum were formed. One believed that the museum should be used as an educational institution with the collections explained to the visitor. The other viewpoint was that the sole purpose of the museum visit should be for enjoyment where learning would be incidental and unplanned. Thinkers who hold the former viewpoint see in the museum almost limitless possibilities for learning.

Richards² believes industrial museums are endeavoring to display the materials that illustrate industrial processes

¹Ibid., p. 9.

²Richards, Charles R. The Industrial Museum, New York: The Macmillan Company, 1925, pp. 1-5.

clearly to young and old so that the foundations of our present life may be understood and so become an element in our culture of today. As the foremost industrial country of the world we cannot omit from our educational program, the story of how we reached this status. Industrial museums are extending the educational program through illustrations of displays by lectures, still, and motion pictures. In this way the various aspects of industrial development, topics of special contemporary interests, new inventions and discoveries, and technical subjects brought into prominence by the events of the day are presented to the museum visitor.

Coleman¹ says that company museums are of use directly and indirectly to management as well as of value to the world, and spring from the need for historical and current records. They preserve systematic reference collections and put up instructive exhibits for employees and visitors to see. Through the museum, the worker is able to learn something of the relation of his individual job to the enterprise as a whole. The two main uses of company museums are for reference by company engineers, designers, and lawyers, and for development of relations with the public. A museum is the surest way, if formally set up, for gathering what is left and preserving for

¹Ibid., p. 25.

the future. In many fields collections can be helpful in guiding invention and avoiding reinvention and assisting in studying the adaptability of new parts to established models.

Many museums have cultivated unseen audiences by means of extension exhibits, publications, and press releases.¹ Depending upon the character of the museum, there are purposeful and casual callers who examine reference collections, records and important objects on exhibition.

Museums that do not get constant attention are sure to be dead museums, while live museums are useful in proportion to what goes into them in thought and effort.²

Boas³ believes that

the art museum has a genuine function in vitalizing art by kindling an emotional interest in making the past come to life; in developing new enthusiasms for historic epochs; and in presenting large concepts of art rather than unrelated problems. The evolution of one period from another to give a sense of historic continuity; the various methods involved in the use of similar materials; the comparisons of periods; the relationship of art to the life of the period; and above all, the development of a fine sensitiveness to the foundation principles are invaluable needs which can be far better performed by the museum than by the school.

¹Ibid., p. 25.

²Ibid., p. 33.

³Boas, Belle "The Art Museum and the School" Worcester Art Museum Bulletin, Vol. XXIII, p. 55, July, 1932.

Fansler¹ states that concrete proof of the reality of the past is offered by museum materials and therefore does more to vitalize the child's experience in the metaphysical regions of time than words or books can hope to do.

THE EDUCATIONAL WORK CARRIED ON IN OTHER MUSEUMS IN CONNECTION WITH SCHOOLS

The Toldeo Museum of Art was the first art museum in the country to carry out an educational program for children.² In 1903, classes from the public schools attended voluntarily, the art appreciation talks and work in drawing and sketching. Through these talks the museum hoped to develop in children a love of art, and the ability to judge between good and poor pictures, sculpture, and music, and to apply the principle of art to their everyday life. For thirty-five years, the museum has endeavored to develop standards of good taste through these talks to classes which relate art to the subject matter of the elementary and secondary schools.

Class attendance by pupils of the Buffalo public schools at the Buffalo Society of Natural Sciences was made compulsory in 1905 by the department of public instruction.

¹Fansler, Robert M., "The Museum and the Cultural Education of the Child," Worcester Art Museum Bulletin, Vol. XIII, p. 56, July, 1932.

²Ramsey, Grace Fisher, Educational Work in the Museums of the United States, New York: The H. W. Wilson Co., 1938, pp. 81-82.

A schedule was prepared and sent to the principal of every elementary school notifying him of the day and hours that the grades in his school were to visit the museum.¹

Special exhibition cases of materials were prepared in connection with the work of the various grades, and after the lecture the classes were allowed to visit the regular collections under the supervision of the teachers.²

In Pittsburgh, all the pupils of the eighth grade in the public schools visit the Art Institute three times a year for instruction in the fundamental qualities possessed by works of art, using the collections of the Institute's galleries for instruction and comparison.³

The Cincinnati Museum⁴ issues a pamphlet which is distributed to the public schools, giving an outline of the history of painting with a catalog of lantern slide illustrations selected from the museum collections. The outline is brief but comprehensive, and the lantern slides are arranged to illustrate the history of painting as an art, expressing the highest phase of civilization in the period to which each be-

¹Howland, Henry R. "The Educational Work of the Buffalo Society of Natural Sciences in Cooperation with the Public Schools," Proceedings of the American Association of Museums, Vol. III, pp. 75-76, 1909.

²Ibid., p. 77.

³"Museum's Attempts to Reach the Schools," American Magazine of Art, Vol. 8, pp. 79-80, 1916-1917.

⁴Ibid., p. 79.

longs.

Visual art materials for elementary and secondary schools, and for colleges are provided by the museum of Modern Art, New York, through grants from the General Education Board and the Rockefeller Foundation. The work has been in progress for seven years and its purpose has been to determine what kinds of teaching materials are best adapted to different age levels and to the needs of schools in regard to their curricula, physical plants, and budgets.¹

¹Museum News, American Association of Museums, Vol. XXI January 1944, p. 1.

CHAPTER III

WORCESTER MUSEUMS - FOUNDING - PURPOSE

The first museum in the United States was established in Charleston,¹ South Carolina, in March, 1773. About a quarter of a century later, in 1799, the first museum in Massachusetts was organized and still functions as the Peabody Museum, in Salem, Massachusetts.

It was not until the nineteenth century that museums were established in Worcester, Massachusetts. Four of these museums, still in existence today, were organized primarily for educational purposes.

The American Antiquarian Society,² the oldest society of an educational nature in the city of Worcester was founded in 1812 and incorporated the same year. The original petition to the Legislature for an act of incorporation set forth that the petitioners were

influenced by a desire to contribute to the advancement of the arts and sciences, and to aid by their progress not only in the United States, but in other parts of the globe.

The object of the Worcester Natural History Society³

¹Ramsey, Grace Fisher, Educational Work in Museums of the United States, New York: The H. W. Wilson Co., 1938, p. 1.

²Rice, Franklin P. Worcester of 1898, Worcester, Mass.: F. S. Blanchard & Co., 1899, pp. 222-223.

³Nutt, Charles, History of Worcester and its People, Vol. II, New York: Lewis Historical Publishing Co., 1919, pp. 757-759.

when it was incorporated in April 1853 under the name of the Young Men's Library Association was the "improvement of the young men of the city by affording them intellectual and social advantages, by the maintenance of a library, reading room, and courses of lectures and classes."

Between the years of 1852 and up to March 6, 1884 when the present title of the Worcester Natural History Society¹ was made by an act of the legislature, several different organizations, such as the Young Men's Rhetorical Society, the Worcester Lyceum, and the Library Society, all educational in scope were merged, and special attention was given to the study of natural history.

In 1860 the existing society devoted its time to the study of natural history, the collecting of specimens, and a series of lectures by prominent people of the time. Twenty years later, in 1880, classes were organized and instructions in natural history were given free of charge.

Special attention was paid to interest school children² in the study of nature through a loan system and by teacher supervised class trips to the museum.

¹Ibid., pp. 758-759.

²Ibid., p. 758.

From 1885 to 1913 the society's summer camp¹ for boys was held on the banks of Lake Quinsigamond. This camp was the first of the kind in the country.

The present Worcester Historical Society was organized in 1875 under the name of the Worcester Society of Antiquity for the purpose of making useful to the public, historical material of all sorts, especially that relating to Worcester city and county. Its aims² also were to stimulate interest in historical studies; to create sentiment for the preservation of historic landmarks; and to cooperate with other institutions in all efforts to these ends; and to be of service to students of historical research seeking its assistance.

Ever since its reorganization in 1921 when the name of the society was changed from the Worcester Society of Antiquity to the Worcester Historical Society,³ it steadily insisted that it was a part of the local educational system, and has worked accordingly. It is a private institution, privately manned and its building is open regularly to the public without charge.

¹A. Farnsworth and G. B. O'Flynn, The Story of Worcester, Massachusetts, Worcester, Mass.: The Davis Press, Inc., 1934, p. 198.

²The Worcester Historical Society Publications, 1944 Vol. III, Worcester, Mass.: Worcester Historical Society, 1944, pp. 5-7.

³Cutler, U. Waldo, Jottings from Worcester's History, Binghamton, New York: Vail-Ballou Press, Inc., 1932, pp. 96-97.

The Worcester Art Museum was founded in 1896, just before the turn of the century, by Stephan Salisbury III for the purpose of serving the community through the "promotion of Art and Art Education in Worcester."¹ Fifty years later, in 1946 the museum still carries on an educational program that interests the people of the community, as is evidenced by the large numbers of adults and children who participate in the museum's activities.

In 1908,² the American Steel and Wire Company Industrial Museum was established to preserve in the community where the industry had its greatest development, a record of wire manufacture as it progressed throughout the United States.

On April 5, 1944³ the officials of the American Steel and Wire Company presented to the Executive Board of the Worcester Natural History Society, the entire contents of the American Steel and Wire Museum. The Natural History Society feels this exhibit has definite possibilities as an addition to the educational work among the children and adults of the community. It will change the course of natural history as it

¹Worcester Art Museum Annual Reports 1896-1908, pp. 3-7.

²Coleman, Laurence Vail, Company Museums. Baltimore, Maryland: Waverly Press, Inc. 1943, pp. 112-113.

³Potter, Richard C., "The American Steel and Wire Museum" Annual Report of the Worcester Natural History Society 1943-1944, pp. 30-31.

used to be administered, into a new interpretation of its function and use in the life of the citizen. By such a policy the children of our city may be led to appreciate the work of generations of men and women who have made Worcester what it is.

In 1927, the Crompton and Knowles Museum¹ was established for the purpose of preserving for present and future employees, and interested persons, the different types of looms, from the hand loom to the modern power-type looms, which contributed to the development of textile machinery.

Events prompted the formal beginning of this museum. When the United States Patent Office² freed a quantity of historical patent models from the national collection, the company sent a delegation to Washington to recover about seventy-five models relating to company patents. A committee of retired employees was set up to go through company files and search in storage houses and attics around the home town for materials. Rivalry between the veterans of the two original stems of the corporation added zest to the effort. (The Company was formed by a merger of two firms in 1897, the older founded in 1837 by William Crompton, the inventor of the first loom for "fancy" weaving.) The oldsters met at the company

¹Coleman, op. cit., pp. 113-114.

²Ibid., p. 37.

frequently to confer with active employees and officials and to identify photographs. They made investigations at local museums and libraries, and in many ways gave the Crompton and Knowles Museum a propitious launching.

The Norton Hall Museum was established in 1927 by the descendants of the founders of the Norton Company for purely sentimental reasons.

After visiting the museum, the writer felt that another reason, educational in scope, might well be added to the original; an attempt to familiarize museum visitors and company employees with the different processes necessary in the manufacture of emery wheels from the raw materials to the finished product.

The John Woodman Higgins Armory¹ at the plant of the Worcester Pressed Steel Company is a museum, library and laboratory of pressed steel products from all places and of all times. It was founded in 1928 and opened to the public in 1930. It was established with a five-fold purpose in view: to inspire steel workers; to attract superior recruits; to stimulate art in industry; to extol steel craftsmanship; and to inform the public.

¹"Industrial Museums. Their Functions and Opportunities." Reprinted from Antiques, September 1943.

ATTENDANCE AT WORCESTER MUSEUMS

The total public attendance at Worcester Museums for the period of one year, during 1944-1945 was estimated at about 140,537 persons, thirty-five per cent of whom were children.

At the American Antiquarian Society no record of attendance was kept of casual visitors or sightseers, but persons doing research work were listed in the visitors' book by name and subject.

Two of the museums, the Worcester Art Museum, and the Worcester Natural History Society kept accurate accounts of attendance, while the rest of the museums estimated their figures.

TABLE I

THE TOTAL ATTENDANCE AT THE WORCESTER MUSEUMS FOR THE PERIOD OF ONE YEAR 1944 - 1945

Name of Museum	Children	Adults	Total
American Antiquarian Society			6000
Worcester Natural History Society	19084	14036	33120
Worcester Historical Society			2000
Worcester Art Museum	26473	61444	87917
Crompton and Knowles Museum			500
Norton Hall Museum			1000
John Woodman Higgins Steel Museum			10000
Total	45557	75480	140537

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The attendance at the Worcester Natural History Society for the period of one year beginning May, 1944 to May, 1945 was 56,525.¹ Of this number 35,452 visitors were adults, and 21,073 were children.

TABLE II

YEARLY ATTENDANCE AT THE WORCESTER NATURAL HISTORY SOCIETY FOR THE PERIOD OF FIVE YEARS BEGINNING MAY, 1940 AND ENDING MAY, 1945.

Year	Adults	Children	Total
May 1940 - May 1941 ²	25,112	16,809	41,921
May 1941 - May 1942 ³	36,061	17,226	53,287
May 1942 - May 1943 ⁴	36,126	20,991	57,117
May 1943 - May 1944 ⁵	24,036	19,084	43,120
May 1944 - May 1945	35, 452	21,073	56,525

The totals for each of the first three years listed, show an increase in the museum's attendance. During the 1943-1944 period there was a decline of 13,997 visitors over the

¹Annual Report of the Worcester Natural History Society 1944-1945, p. 15

²Worcester Natural History Society Quarterly, Vol.II #2, May 29, 1941.

³Worcester Natural History Society Quarterly, Vol. III #2, May 15, 1942, pp. 6-7.

⁴Annual Report of the Worcester Natural History Society, 1942-1943, p. 8.

⁵Annual Report of the Worcester Natural History Society, 1943-1944, p. 7.

previous years' attendance, and it was felt by museum officials that this was partly due to the war time restrictions on heating, lighting (dim outs), and transportation, and the wartime activities in which many former visitors and members were participating. Although "Brown outs" restrictions were not over until May 8, 1945, and gasoline rationing ended August 15, 1945, there was a steady rise in the museum attendance especially in the adult group.

ATTENDANCE AT THE WORCESTER HISTORICAL SOCIETY

The Worcester Historical Society with an estimated attendance of two thousand visitors lacks adequate space for the displaying of its collections. During the war years lack of fuel made it necessary to close some of the rooms containing the exhibits. For this reason, and because only two persons were in the museum to take care of the necessary work involved in its upkeep, children not accompanied by adults were discouraged from making visits.

During the period beginning April 1, 1944 and ending March 31, 1945 a total of 87,917 persons visited the Worcester Art Museum.¹ Of these, 61, 444 were adult visitors and 26,473 were children. For the first time in the history of the museum

¹Personal interview with Mrs. Minnie Levenson, June, 1945

separate records were kept for child and adult visitors for the period beginning April 1, 1944 through March 31, 1945.

Up to April 1943, no accurate account had been kept of museum attendance and the fact that previous figures were estimated might be one reason why preceding totals were so high.

TABLE III

YEARLY ATTENDANCE AT THE WORCESTER ART MUSEUM FOR A
FIVE YEAR PERIOD BEGINNING APRIL 1, 1940, AND
ENDING MARCH 31, 1945

April 1940 through March 1941.....	158,596
April 1941 " March 1942.....	153,332
April 1942 " March 1943.....	109,802
April 1943 " March 1944.....	88,627
April 1944 " March 1945.....	87,917

ATTENDANCE AT THE WORCESTER INDUSTRIAL MUSEUMS

The Industrial or Company museums do not keep an accurate record of attendance. Their visitors are usually adults who have come to visit the factory; or distributors and sales engineers who are making a study of some particular phase of the company's industry and are invited to view the museum exhibits; employees; and students from vocational or trade schools.

During the war years, many visitors were discouraged from visiting the museums, since the plants were busily engaged in making war products and the museums were located in the factory buildings.

CHAPTER IV

ADULT EDUCATION AT WORCESTER MUSEUMS

LECTURES

Museums have attempted to educate their adult public by offering lectures to members or to the general public.

The Worcester Museum of Natural History offered lectures as early as 1885.¹

The Worcester Art Museum² through a grant from the Carnegie Corporation offered a series of lectures on the Processes of Art and Industrial Art. These lectures were planned to give the layman engaged either in the retail sale or the manufacture of domestic articles, some idea of how objects were made. To interest business men and women engaged in the production or sales of products made in the community, talks were given on textiles, metals, ceramics, design and color. Oftentimes the lectures were supplemented by exhibitions made up of objects in the museum collections and by films. The popularity of the series might be judged by the average attendance of one hundred fifty persons maintained at the Wednes-

¹Ramsey, Grace Fisher, Educational Work in Museums of the United States, New York: H. W. Wilson Co., 1938, p. 21.

²Ibid., p. 24 .

day evening lectures throughout the year.

LECTURES AT THE WORCESTER ART MUSEUM

During the year beginning April 1, 1944 and ending March 31, 1945 a total of sixty-six lectures were given at the Worcester Art Museum. One of these was an illustrated talk for children; eight were talks by outside speakers; twenty-nine were gallery talks for the parents of children attending drawing and painting classes at the museum and were offered usually by some member of the museum staff or by Miss Eleanor Garvey, Assistant Museum Instructor. The remaining twenty-eight were weekly lectures in a course on French Civilization given in cooperation with Clark University. The course was given at the Museum by Dr. David M. Dougherty of Clark University and Miss Marian Davis of the Worcester Art Museum.

In 1924 University Extension work was begun at the Worcester Art Museum in connection with the University Extension Service of the Massachusetts State Department of Education. Credit for work done in the museum was given at those universities and colleges cooperating with the State of Massachusetts.¹ In 1933, with the financial assistance of a Carnegie grant, courses were offered to students from the colleges of the city in the "History of Art and Architecture."

¹Ibid., pp. 41-42.

Later, this work was offered in cooperation with Clark University of Worcester in the form of extension courses. Since then, courses have been given on French and German Culture and the lectures are supplemented by slides, films, photographs, musical recordings or other illustrative materials available at the museum.

In April, 1944, two of a series of four illustrated lectures in Italian, on Italian Masters, were presented by Maestro Sandro Benelli¹ of Clark University. The series included: "Raphael and the Vatican Frescoes"; "Leonardo da Vinci's 'Last Supper'"; and "Michelangelo and the Sistine Chapel."

On April 30, 1944 a special gallery talk was made by Bartlett H. Hayes, Jr.,² Director of the Addison Gallery of American Art, Philips Academy, Andover, in connection with the exhibition of "Paintings by the Eight." His subject was "Eight Men and a Revolution."

On November 16, 1944 a lecture was given by Lloyd Goodrich, Research Curator of the Whitney Museum of Art on "Homer's Life and Work" in connection with an exhibition of Homer's paintings at the museum.

On December tenth and seventeenth, gallery talks were

¹Worcester Art Museum News Bulletin and Calendar, Vol. IX, No. 7, p. 4, April, 1944.

²Ibid., p. 1.

given by members of the museum staff on the Winslow Homer exhibition.¹

On the sixteenth of December, Miss Dorothy F. Cruikshank, Instructor in charge of the Children's Department, gave an illustrated lecture for children entitled, "The Christmas Story in Art."²

On the twentieth of January, Dr. Walter Gropius,³ Professor of Architecture at Harvard University spoke at the museum at a meeting of the Eastern Arts Association on "Site and Shelter after the War." The meeting in Worcester carried out the Association's theme, the study of one's community. The exhibition "This is our Town," an experiment in visual education was prepared by the Educational Division, and School of the Museum in cooperation with the various municipal, business, educational, and civic institutions of Worcester, and consisted of maps, photographs, and objects indicating the industrial development together with drawings and paintings of places of interest in the community by the art students of the Museum School and the children of the museum classes.

On February twenty-fifth, a Gallery talk was presented

¹Worcester Art Museum News Bulletin and Calendar, Vol. X, No. 3, p. 1, December, 1944.

²Ibid., p. 6.

³Worcester Art Museum News Bulletin and Calendar, Vol. V, No. 4, p. 1, January, 1945.

by Howard Devree, an art critic of the New York Times, in connection with the exhibition of the work of Contemporary American Paintings.¹

WORCESTER HISTORICAL SOCIETY

Because of the fuel shortage the monthly meetings of the Worcester Historical Society had to be discontinued and only three meetings were held during the year 1945.² An average of three hundred members attended the three meetings. The lecture in January was given by Harry G. Stoddard on "The Romance of Worcester Industry." Mr. H. Clayton Kendall gave an illustrated lecture on "Water - Fog" at the May meeting, and an address by George R. Stobbs, president of the society, was given at the June meeting on "Some Highlights in the Early History of the Worcester County Bar."

These reports were published in the Society's Proceedings.

The American Antiquarian Society has two meetings a year at which time members of the organization present lectures on historical subjects. These talks are for the members

¹Worcester Art Museum News Bulletin and Calendar, Vol. X, No. 5, pp. 1-2, February 1945.

²Worcester Historical Society Publications, Vol. III, p. 7, No. 2, September, 1945.

only, and are published in the two proceedings of the year.

WORCESTER NATURAL HISTORY SOCIETY

A good deal of the educational work at the Worcester Natural History Society was done through its lecture courses. One of the most popular programs was that of the Sunday Afternoon Lecture series which opened its eighty-eighth season with talks designed to cover some of the war activity in geography and ethnology. A portion was devoted strictly to the field of natural science and a few to the interpretive side of natural history.

The following comprise the list of dates, speakers, and subjects of the eighty-eighth season of Sunday Afternoon Lectures at the Worcester Natural History Society:

- Jan. 14, 1945¹ Carl W. Erickson, City Evening Editor Worcester Telegram & Gazette; Curator of Conchology, Worcester Natural History Society. "Kodachroming at Ebb Tide."
- Jan. 21, 1945 Dr. W. Elmer Ekblaw, Professor of Geography, Clark University. "Russia and its Expansion."
- Jan. 28, 1945 Myron F. Converse, President, Worcester Five Cents Savings Bank; President, Worcester Natural History Society. "The History of Worcester's Transportation System."

¹Nature Outlook, Vol. III, No. 1, p. 38, November 1944.

- Feb. 4, 1945 Rear Adm. Wat Tyler Cluverius, President
Worcester Polytechnic Institute. "Set of Our Sails."
- Feb. 11, 1945 Dr. Ernest D. Wilson, Head Department of Chemical Engineering and Chemistry, Worcester Polytechnic Institute. "The Spectacular in Chemistry."
- Feb. 18, 1945 Dr. Walter E. Masters, Lincoln Hospital. "Darkest Africa."
- Feb. 25, 1945 Dorothy Lowell Salter, Salter Secretarial School. "Maine in Color."
- Mar. 4, 1945 Forbush Bird Club
- Mar. 11, 1945 Dr. Homer P. Little, Professor of Geology, Clark University. "Fun with Geology."
- Mar. 18, 1945 Dr. Erwin C. Miller, Physician. "Fish and Fishing."
- Mar. 25, 1945 Mr. Lawrence R. McCoy, President, Laurence R. McCoy Company. "Egypt" (illustrated)

Museum Extension Lectures:

Outside lectures were given by the director to eighty-six groups and the subjects covered were the Work of the Museum, Forestry and Conservation, The Food Situation, Victory Gardening, the Project Method of Teaching Natural Science, and Emphasis in Education.¹ These lectures were given all over

¹Annual Report of the Worcester Natural History Society p. 9, 1944-1945.

the State of Massachusetts in addition to talks given in New York, Washington, D. C., Richmond and Marion, Virginia, Chihuahua, Mexico, El Paso, Texas, and Buffalo, New York.

Besides the lectures given by the director, talks were given on request by the museum curators to groups at Women's and Men's Clubs, to Parent Teacher Associations, Grangers, Agricultural and Garden Clubs, Service Clubs, and Conservation and Nature Clubs. Fourteen talks were given on astronomy, seven on ornithology, three on American ethnology, one on entomology, six on conchology and one on physiology.

A series of talks in Italian and English were given at the museum by Maestro Sandro Benelli of Clark University, on the handwork of Italian women in connection with an exhibition of Italian handicrafts for the program on Cultural Exhibits.¹

Formal lectures by outside speakers for members and visitors of the Aldrich Astronomy Club were held on the second Tuesday of each month, beginning in October and ending with the April meeting.² Following are a list of the speakers and their topics:

October, 1944 Mr. Charles A. Federer, Jr., of Harvard College Observatory, "Observational Methods - Old and New."

¹Article in Worcester Telegram, June 6, 1944.

²Annual Report of the Worcester Natural History Society 1944-45, pp. 36-37.

November, 1944 Dr. Percy M. Roope of Clark University, "Spectrum Analysis."

December, 1944 Mr. R. Newton Mayall, "Sundials and the Measurement of Time."

January, 1945 Mr. Frederick Avis of Worcester Academy, "The Solar System and Possibilities of Life on Other Planets."

February, 1945 Mr. Charles J. Hudson, "An Evening with the Stars."

March, 1945 Dr. Alice Farnsworth, Director of the Astronomy Department of Mount Holyoke College, "Reflections on the Moon."

April, 1945 Mr. Leon Campbell, Astronomer of Harvard College Observatory, "Under Southern Skies."

An average attendance of forty persons was maintained at these monthly lectures.

MUSEUM LECTURES AT NORTON HALL

Between thirty and forty students from the Harvard University School of Business Administration visit Norton's three times a year to go through the plant and to view the museum exhibits.¹ At this time company officials give lectures

¹Personal interviews with Mr. Swanstrom and Mr. Zacher, May, 1946.

concerning the industry or talks regarding the collections.

Every second week small groups of salesmen and distributors visit for illustrated movies having to do with the industry or its development.

Weekly lecture courses are given to small classes of distributors and sales engineers for a period of from three months to one year.

During the year 1944-1945 twenty-four Chinese students were sent to the Norton Company by the Chinese Industrial Commission of Washington, D. C., to attend weekly lectures at Norton Hall in connection with the industry and its development.

MUSEUM LECTURES: JOHN WOODMAN HIGGINS STEEL MUSEUM

Several times a year lectures are given in the lecture room of the John Woodman Higgins Steel Museum concerning the collections, or the growth of the steel industry. Mr. John Woodman Higgins, museum head, frequently is called upon to speak to organizations, school assemblies, and to graduating classes of the local Boys' and Girls' Trade Schools, on these same subjects. Some of his best-known talks are: "The Industrial Museum," "The Forge of Vulcan," "Art in Steel," and "Art in Industry." Another talk on "Vocation, Skills and Brains," originated in an address before a vocational guidance conference in Worcester. All of these talks are printed and can be had by simply mailing a request to the Museum.¹

¹Personal interview with Mr. Higgins, April, 1945.

EVENING CLASSES AT THE WORCESTER NATURAL HISTORY SOCIETY

Evening School

The fifth season of the Adult Evening School opened on October 10, 1944 and continued through May, 1945. Evening classes were held at the museum three nights a week on Tuesdays, Wednesdays, and Thursdays, from seven to nine o'clock.

The following courses were offered:

Tuesday: Astronomy - Paul H. Steele, Curator of Astronomy and Meteorology at the Museum
 Study of Herbs - Ben Charles Harris, Museum Herbalist
 Fly-tying Training Class - Henry Scarborough.

Wednesday: Birds - David K. Wetherbee, Curator of Ornithology at the Museum. This course included the study of birds, their habits, classification, identification and methods of observation.

Minerology - Raymond G. Newman, Assistant Curator of Minerology at the Museum.

Study of Shells - Carl W. Erickson, Curator of Conchology at the Museum.

Thursday: Chemistry - Richard C. Potter, Director of the Museum.

Beekeeping - Eugene F. Trainor, Jr.

Human Physiology - Dr. Walter E. Masters of the Lincoln Hospital gave a series of eight group talks, beginning on January 18, 1945.¹

The Astronomy Classes were held each Tuesday evening beginning in the month of October and continuing through May.

¹Nature Outlook, Vol. III, No. 1, p. 29, November, 1944.

The meetings consisted of informal discussions of current astronomical topics and reports by the curator and the class members, and the viewing of celestial objects when the weather permitted. Interested members of the class started the construction of a reflecting telescope for the museum under the direction of Mr. Harold E. Magnuson, Associate Curator of Astronomy. Members also took part in a scientific program of timing occultations of stars by the moon.¹

The Department of Mineralogy met on Tuesday evenings to examine and catalogue for the use of the museum, specimens of rock and minerals collected during the summer field trips from Worcester County localities. The meetings consisted of talks and illustrated lectures and reports by the instructor and class members.

A class in fly-tying was organized by Mr. Henry Scarborough in cooperation with the Red Cross for the purpose of training a number of volunteer teachers who were interested in traveling to the Cushing General Hospital to instruct the soldiers in this type of hobby. At the completion of the training period schedules were arranged and classes for soldiers were held at the hospital.²

¹Personal Interview with Paul H. Steele, June, 1946.

²Annual Report of the Worcester Natural History Society 1944-1945, p. 8.

Informal discussions, illustrated lectures, and the recognition of herbs from local areas, were the methods featured in the weekly classes on the Study of Herbs, at the museum, under the direction of Ben Charles Harris, Museum Herbarist.

Weekly classes, under the supervision of David K. Wetherbee, Curator of Ornithology, were held on Wednesday evenings, for the purpose of identifying birds, and studying their habits. Many of the lectures were illustrated.

The weekly class on "Study of Shells" was conducted by Mr. Carl Erickson, curator. The course consisted of the study of various types of shells in the museum collection, and the arrangement of displays. Reports were made by the various members on meeting nights, on families of shells; the peculiarities of structure, etc. Very little study of the mollusk was made as an animal, but concentration was kept on the shell. Trading of private specimens by class members was one of the most important activities of the class meetings. During the summer, trips were made to nearby ocean shores to collect specimens, and to local ponds, lakes, and streams for fresh water and land snails.

An educational program, consisting of lectures and illustrated talks, was carried on for the members of the Worcester Victory Garden Club by Richard Headstrom, Curator of Ento-

mology. Identification of insects harmful to local garden products, and the methods and chemicals necessary for their extermination, were the particular problems featured at these meetings.

At the weekly meeting of the class in Beekeeping¹ the first hour was devoted usually to discussion of the previous week's assignment by members and curator, Mr. Eugene Trainor. Part of the course related to the habits of bees; the manipulation of the hive; the job of the bees in the hive; the queen bee; pollination; difficulties with bees; causes and treatment of irritability among bees; and maladies from which bees suffer. Members of the class were interested in keeping bees for commercial reasons and so a part of the course was devoted to topics concerning the preparation and merchandising of honey.

MUSEUM CLUBS

WORCESTER NATURAL HISTORY SOCIETY

Seven clubs were functioning at the Worcester Natural History Society, during the year 1944-1945, meeting weekly for the purpose of holding discussions concerning their hobbies; to plan their activities; to plan field trips; to catalogue specimens; to exchange specimens; to attend class lecture courses; to make reports; and to hear outside speakers.

¹Personal interview with Mr. Eugene Trainor, May, 1946.

Following are a list of the Clubs:

The Aldrich Astronomy Club

The Worcester County Beekeepers Association

The Worcester Entomological Club

The Worcester Mineral Club

The Worcester Conchology Club

Forbush Bird Club

The Stamp Club¹

CLASSES FOR ADULTS

Weekly classes for adults were conducted at the Worcester Art Museum from half-past seven to nine o'clock on Tuesday evenings, beginning on November 7, 1944 and ending May 22, 1945.²

Classes were offered in Life Drawing, Sketching, Still Life, and Fashion Illustration, and the media used were oils, water color, and pastel.

Evening classes first were started in 1939 with a course in sketching which followed the course of study used by the day school. This course proved so popular that classes gradually were organized in other art subjects until they now

¹Personal interview with Mr. Michael Roche, March, 1945.

²Personal interview with Mr. Francis Hall, June, 1946.

cover those listed above. At the present time classes are informal and do not follow a prescribed course, except in the life class where a series of lectures and lessons are given for the benefit of beginners.

Members of the class and museum school faculty discuss the work being done and offer constructive criticism to the group or to individuals.

The evening classes are open to all adults and no experience in art work is necessary for admission to a class. Varying degrees of ability are represented in these classes and a beginner getting the feel of the brush might find himself working alongside a professional who attends the weekly classes to keep up his art hobby.

Members of the class buy their own equipment at almost cost price in the museum school store, and pay an admission fee of twenty-five cents per session, if not a museum member.

Every Wednesday afternoon from three to five o'clock and from October, 1944 through May, 1945, classes in water color work were conducted at the museum for pupils from the public and parochial high schools. Materials for work were provided by the museum and no attendance fee was charged. Before the water color lesson got under way a part of the period was devoted to constructive criticism of the previous week's

work followed usually by a short period of informal discussion; or a talk on the lesson of the day; or the development of a new problem.

On Saturday mornings from October, 1944 and through May, 1945 weekly classes were conducted at the museum in oil painting. The pupils forming this class were comprised of a selected group from the sophomore, junior and senior classes of the local high and trade schools. At one time pupils were chosen by the regular classroom teacher if the pupil wished to join the advanced class. At the present time pupils are selected by the art teachers because of their art ability and keen interest in the subject. Here too, materials are provided by the museum and admission to the class is free of charge. A regular lesson plan is followed and students build up their work step by step from charcoal to oils.

CLUB SPONSORED BY ART DEPARTMENT OF WOMEN'S CLUB

The only club connected with the Worcester Art Museum was formed by a group of women, members of the Worcester Woman's Club, who were interested in carrying on their art hobbies. They met weekly from October, 1944 through May, 1945 from nine-thirty o'clock in the morning to twelve noon. This group had formal instructions from members of the regular Museum School faculty for part of the period, and then they carried on their work in any medium they chose.

SCHOOL OF THE WORCESTER ART MUSEUM

The School of the Worcester Art Museum¹ was founded in 1898 and is located in the Museum building where Students have the full advantage of daily contact with the Museum's collections, use of the library, the photograph collection, the music equipment, and all other educational facilities. Students enrolled for the regular course become Museum members and are entitled to all membership activities and privileges.

Two large, well lighted studios, each sixty-six feet long by twenty-nine feet in width, provide for all of the classes in drawing and painting. The East Studio is devoted to the work of elementary and high school students who visit the museum after the regular school hours, and the West Studio is used by students of the regular Day School.

The departments of sculpture and design are located on the lower floor of the School in well-lighted and air-conditioned rooms, and a library common room is also provided.

The School of the Worcester Art Museum,² revised its curriculum to serve the best interests of both the war effort and its students. It prepared its students for needed war work

¹School of the Worcester Art Museum, p. 3, 1944-45.

²Ibid., p. 4.

while continuing to provide them with fundamental training in the fine and industrial arts.

A course in Military and Industrial Camouflage was introduced in 1942 and proved very useful to the men students who later joined the armed forces. Another course in Engineering-Drafting, designed especially for women, was in operation for two years, and offered basic training in a type of work for which there was great demand during the war years.

COURSE OF STUDY¹

During the year 1944-1945, the school offered general instruction in fine and commercial art under the direction of Herbert P. Barnett. The course of study was designed to develop the individual, creative ability of the student, and to provide him with a technical proficiency in the various media of art expression.

In the Fine Arts course, emphasis was laid upon fine drawing, composition, and the study of anatomy. Drawing was supplemented by the creative use of dynamic design, while in Still Life, experimentation with the principles of the post-impressionists, was stressed. The painting course included work on full-length figures, portraits, mural compositions in oil, and other media and techniques.

¹Ibid., pp. 7-8.

A special course was offered in the Techniques of Painting, including pure egg tempera, egg emulsions, mixed technique and other methods of the old masters.

A supplementary course also was offered in Composition and Theory of Design, for the purpose of analyzing the works of the old masters, and developing from them original compositions. The individual creative abilities of the students were studied in this class for the purpose of determining their special aptitudes.

To insure excellent draughtsmanship, a daily sketch class was held in addition to the regular work from the model.

Work in Sculpture, which was required of all students, emphasized understanding of form and three dimensions, and included thorough training in the technique of the medium used.

Current commercial problems of design were stressed in the Design Course, in order to make the student a self-sustaining member of the community. Advertising, product, industrial and architectural design, interior planning, mechanical drawing, engineering-drafting, fashion illustration, lettering and other branches of commercial art were taught in separate classes by experts in the various fields.

All students enrolled in the day classes were required to attend lectures given at the Museum during the school year on subjects related to fine and industrial arts. The History

of Art course, given by Dr. Dougherty of Clark University, together with other lectures by specialists, offered the students an exceptional background in all fields of art.¹

Upon the satisfactory completion of three years' work students are given certificates. Those desiring a degree in teaching, supplement their work at the school by taking academic courses at Clark University, the Worcester State Teachers College, or the Massachusetts School of Art, in Boston.

SPECIAL EXHIBITS HELD AT THE WORCESTER ART MUSEUM FROM
APRIL, 1944 THROUGH MARCH, 1945

The most popular and best attended activities at the Worcester Art Museum during 1944-1945 were the series of planned exhibits. In connection with these exhibits lectures, sometimes illustrated, were given by speakers from the museum staff or outside lecturers. These exhibits also show how cooperative other Worcester museums, industrial plants, and organizations were when holding special programs.

The planned exhibits for the period of one year beginning April, 1944 and continuing through March, 1945 were as follows:

April 27, 1944 through May 24, 1944 Exhibition: Paintings by the Eight. This exhibition of paintings by the Eight, repre-

¹Ibid., p. 8.

sented a group of New York artists who withdrew from the National Academy and held an independent exhibition in 1908. Organized by the Brooklyn Museum, this exhibition made its only New England appearance in Worcester.

The painters composing this group were Arthur B. Davies, William J. Glackens, Robert Henri, Ernest Lawson, George B. Luks, Maurice Prendergast, Everett Shinn, and John Sloan.

The exhibition included fourteen paintings from the original collection of 1908.

April 16, 1944 - June 30, 1944. Exhibition: Worcester Artists Group, in the small gallery of contemporary art. It represented the work of seven artists who organized in 1942 for the purpose of arranging exchange exhibitions with similar groups in other New England cities.¹

May 14, 1944 - June 25, 1944 Exhibition: "Photography is an Art," a special exhibition prepared by the Philadelphia Museum.

May 16, 1944 - May 30, 1944 Exhibition: Worcester Photo Clan.²

June 4, 1944 - June 25, 1944 Exhibition: Modern French Tapestries. The design for these tapestries, woven at the Beauvais factory, were taken from the works of contemporary French

¹Worcester Art Museum News Bulletin and Calendar, Vol. IX, No. 7, pp. 1-4 April, 1944.

²Worcester Art Museum News Bulletin and Calendar, Vol. IX, No. 8, pp. 1-3 May, 1944.

painters and included Bauchant, Derain, Leger, Lurcat, Miro, Picasso, and Rouault. In addition to this group the Museum displayed its own Aubusson tapestry, "Harvest Time," designed by Jean Lurcat.

June 11, 1944 - July 9, 1944 Exhibition: American Drawing Annual IV, organized by the Albany Institute of History and Art, and composed of drawings by men and women in the armed forces.

August: Two special exhibitions for Children: Cowboys and Indians - The Art of Games.¹

October 7, 1944 - November 12, 1944 Exhibition: The Worcester Music Festival: Prints and Programs. Arranged in honor of the eighty-fifth season of the Festival. The exhibition included the earliest extant Festival program, dated 1859, as well as portraits of artists and composers honored in Worcester concerts.

October 29, 1944 - November 5, 1944 Exhibition: Etchings by Wenceslaus Hollar, seventeenth century Bohemian artist. This exhibit was held in honor of Czechoslovakia week, and in cooperation with the "Worcester and the World" project organized by radio station WTAG.

November 16, 1944 - December 17, 1944 Exhibition: Winslow Homer. More than sixty oils and water colors, fifty prints

¹Ibid., pp. 2-3.

and a number of drawings, were selected with the advice of Lloyd Goodrich, Curator of the Whitney Museum of American Art for this exhibit. These were supplemented by sixteen water colors and two large oils which are owned by the Museum.

November 11, 1944 - December 9, 1944 Exhibition in the Children's Studio: Horses.

December 16, 1944 - January 13, 1945 Exhibition in the Children's Studio: Madonnas.¹

December 17, 1944 - January 14, 1945 Exhibition in the Bancroft Room: Prints by Winslow Homer.²

January 6, 1945 - January 21, 1945 Exhibition: Paintings by Cleveland Artists. Thirty oils by Cleveland artists, selected from the twenty-sixth Annual Exhibition.

January 14, 1945 - February 21, 1945 Exhibition: Objects from the Netherlands East Indies. This exhibit included material from the islands of Sumatra, Java, Celebes, Borneo, Bali, Sumbawa, Sumba, and Nais lent by the Buffalo Museum of Science, the Brooklyn Museum, the University Museum of Philadelphia, together with photographs supplied by the Netherlands Information Bureau. The objects showed the wide variety in the arts of this region, ranging from the primitive to the highly sophisticated. Most of the objects were of recent origin, dat-

¹Worcester Art Museum News Bulletin and Calendar, Vol. X, No. 2, pp. 1-8, November, 1944.

²Worcester Art Museum News Bulletin and Calendar, Vol. X, No. 3, p. 6, December, 1944.

ing in large part from the end of the last century and including textiles, weapons, sculpture, masks, and puppets used in dramatic performances.

January 20, 1945 - February 11, 1945 Exhibition "This is Our Town" This Exhibition was prepared by the Educational Division and School of the Museum, in cooperation with municipal, business, and civic institutions of Worcester. It consisted largely of photographs, maps, and objects indicating industrial development, together with drawings and paintings by students which aimed to interpret the community, to point out features characteristic of Worcester; and to represent its principal activities and interests.

To symbolize Worcester's industrial development local products were effectively mounted as an educational exhibit. Included were such important examples of modern war production as the airplane propellor lent by the Worcester Pressed Steel Company, fire-fighting equipment lent by the Rockwood Sprinkler Company, steel forgings from the Wyman-Gordon Company, and samples of wire and cable from American Steel and Wire Company. Colored, illuminated photo-murals pictured industrial processes at these plants and at the Norton Company, while other displays represented the activities and products of the Reed Prentice Corporation and the Crompton and Knowles Loom Works.

The people of Worcester, their dwellings, their cultural, professional, and social activities were illustrated by photographs. Here were pictured the manifold human and personal interests which, together with industry, form the characteristic pattern of the community. Many of the photographs were furnished by the Telegram and Gazette, the Community Chest, William Filene's Sons Company, and the institutions represented.

The Central Gallery contained a decorative map of Worcester, as well as paintings by students of the Museum School, interpreting their town.

The exhibition aimed to provide a broader view of the related groups and the collective unity implied in Worcester's dual tradition of industrial progress and cultural attainment.¹ February 22, 1945 - March 18, 1945 Exhibition: Contemporary American Paintings. Their exhibition was an attempt to assemble a significant, forward-looking group of pictures representing certain aspects of painting in the United States today.²

March 4 - 25, 1945 Exhibition: Connecticut Water Color Society.

¹Worcester Art Museum News Bulletin and Calendar, Vol. X, No. 4, pp. 1-4, January, 1945.

²Worcester Art Museum News Bulletin and Calendar, Vol. X, No. 5, p. 4, February, 1945.

March 29, 1945 - April 29, 1945 Exhibition: Modern Drawings. This exhibition was organized by the Museum of Modern Art, New York and assembled by Monroe Wheeler in an attempt to make it "the first general international survey to be undertaken in America of the particular aspects of modern art revealed by draughtsmanship." It included the work of some of the painters represented in the Contemporary American Paintings exhibition as well as drawings by their European contemporaries, and immediate predecessors.

Approximately one hundred twenty-four drawings in such various media as pencil, pen, silverpoint, crayon, sanguine, charcoal, and pastel comprised the exhibition.¹

CULTURAL EXHIBITS

HELD AT THE

WORCESTER NATURAL HISTORY SOCIETY

During the year 1944-1945 the Cultural Exhibits which had been started in 1943 were continued at the Worcester Natural History Society. These exhibits were designed to show the contributions of Europe and the near East to American culture.

The 1944 program opened with the seventh exhibition of the series which featured articles from England and Scot-

¹Worcester Art Museum News Bulletin and Calendar, Vol. X, No. 6, p. 2, March, 1945.

land. Museum walls were hung with posters and photographs of old English towns and homes from which the ancestors of many Worcester folk had migrated. Glass cases contained fine bone chinaware from England, and one interesting display of English silver, copper, and brass, included silver spoons of the George III period. Prominent in the exhibit were brocades, and shawls from India and Scotland, Irish linen tablecloths and napkins, and bright Scotch plaids.

The eighth Cultural Exhibit of the series, the Greek Exhibit, opened with a lecture by Reverend Theodore Theodorides, Professor at the Greek Theological School of Pomfret, Connecticut, and teacher of Greek with the Army Specialized Training Program at Clark University. Following the lecture there was a Greek musical program and waitresses in Greek garb served sweet Greek pastries and coffee to the guests.

The museum cases contained many interesting objects from many parts of Greece and included hand-made laces and linens, wood-carvings, costumes, Grecian vases, figurines and plates.

The Italian Exhibit opened with a talk on Italian Culture by Henry Harmon Chamberlain of Worcester. He spoke principally of the influence of Dante and Petrarch on England and America. Sandro Benelli of Clark University showed slides on the "Creative Work of Italian Women." A special feature of

the exhibit was the model Italian kitchen complete with stove, cooking utensils and tables. During the exhibition Italian women showed the processes necessary in the preparation and cooking of an Italian meal.

Museum cases held tumbalo laces, embroidered shawls, linens, mosaic jewelry, and Italian pottery.¹

MOTION PICTURES AT WORCESTER ART MUSEUM FOR THE PERIOD OF ONE YEAR BEGINNING APRIL 5, 1944 AND ENDING MARCH 31, 1945

Motion pictures for educational purposes have grown to be important factors in museum work. At the Worcester Natural History Society a weekly Saturday morning program was carried on from the first week in November, 1944, through the last week in April, 1945. Here children saw films which were related to natural history subjects. At the Worcester Art Museum a year round program was conducted and two types of films shown. Those for adults and older children, and those for younger children between the ages of five and ten years. Some of the films at the Worcester Art Museum were shown in connection with the WTAG radio program Worcester and the World:

The films for children shown at the Worcester Natural History Society and Worcester Art Museum are listed in Chapter V.

¹Nature Outlook, Vol. III, No. 1, pp. 12-14, November, 1944.

Following are a list of motion pictures for adults and older children presented at the Worcester Art Museum during the year from April 5, 1944 through March 21, 1945:

April 5, 1944 British film in technicolor:

"The Great Mr. Handel"

April 8, 1944 Film: "Nine Days a Queen"

April 19, 1944 British film: "The Thirty-nine Steps"

April 22, 1944 Films: "People of Western China"

"Ancient Chinese Paintings in America"

"How to Paint in the Chinese Way"

"Out of a Chinese Paint Brush"

"Rainbow Pass"¹

May 6, 1944 Film: "The House of the Seven Gables"

May 20, 1944 Film: "Our Town"

FILES IN WARTIME

May 1, 15, 29-

June 12, 26 Saturday film programs. The motion picture was used as medium of information to describe our war effort and presented on alternate Saturdays with two showings of each program. The themes were as follows:

"Science and War"

"Vital Materials of War"

"Life in the Armed Forces"

¹News Bulletin and Calendar, Vol. IX, No. 7, p. 4, April, 1944.

Military Action: "The Art of War"¹

July Films for older children and adults:

"Film Festival in the Arts"

"Why People Fight"

July 1, 1944 Land of Liberty: "One hundred fifty years of
American History"

" 8, 1944 "Things to Come": A British film based on H.G.
Wells' novel

" 15, 1944 "Janosik": A Czech Robin Hood of the 17th Cen-
tury and fight for freedom.

" 22, 1944 "The Wave": Mexican fishermen.

" 29, 1944 "La Marseillaise": Pierre Renoir's interpreta-
tion of the French Revolution.

Aug. 5, 1944 Sports

"Action": sports and games in Great Britain

"Sports in the U.S.S.R.": sports and recreation
for all.

"Physical Training in Sweden": Physical Educa-
tion and Gymnastics

"Poetry of Motion": Slow motion studies of va-
rious sports

Aug. 7, 1944 Music

¹News Bulletin and Calendar, Vol. IX, No. 8, p. 4,
May 1944.

"Symphony of Orchestra": Structure of the
symphony orchestra

"Leningrad Music Hall": The famous music, dance,
and theater arts of the Russian
people

"An Optical Poem": Music interpreted by color
and geometric figures

Aug. 12, 1944 "Bambi": Walt Disney's technicolor cartoon of
the forest and its creatures.

Aug. 14, 1944 Music

"Woodwind Choir": various woodwind instruments
demonstrating tone quality and
techniques.

Accordian Serenade: Advance of old Moscow.

Concert at the Front: Type of Entertainment that
was popular at the Russian Front
Red Army Chorus: Folk and war songs by the
famous chorus.

Swan Lake Ballet: Tschaikowsky's music per-
formed by the Corps de Ballet,
Moscow Theater.

Aug. 19, 1944 The Dance

Indian Dances of the Southwest: An authentic
color record of ceremonial dances.

Death Day: Eisenstein's Mexican film featuring
the dances of the Fiesta of
Calaveras

Bach - Air for G. String: Dorish Humphrey and
a group of her dancers interpret
the music.

Folk Dances: Three Russian dances - Moldaventz,
Krizhacheck, and Kazaki.

Ballet Mecanique: Produced and directed by
Fernand Leger.

Aug. 21, 1944 Music

Moonlight Sonata: Paderewski plays Chopin,
Beethoven and Liszt.

Aug. 26, 1944 "The Documentary Film"

Man of Aran: Robert J. Flaherty's classic of
life on the barren island of Aran

Aug. 28, 1944 Music

"String Choir": Demonstrating the moods, ef-
fects and techniques of stringed
instruments.

"Wizard's Apprentice": A visual interpretation
of Duka's fantasy.

Jose Iturbi, Harpsichord: Iturbi explains the
workings of the instrument and
plays Rameau.

Igor Gorin, Baritone: Largo Al Focetotum,
Aria from "The Barber of Seville"
by Rossini.

Abstractions: Music related to visual form and
motion.¹

Nov. 4, 1944 Film program on Czechoslovakia: Silent Village
and Czechoslovakia.

Nov.11, 1944 Film program on Denmark.

Nov.18, 1944 Film program on France: LaGuerre des Bantons,
French feature

Nov.25, 1944 Film program on Great Britain²

Dec. 2, 1944 Film program on Greece: Shrine of Victory

Dec. 9, 1944 Film program on India: Voice of India and Chang-
ing Face of India

Dec.16, 1944 Christmas film program: Story of the Vatican³

Jan.20, 1945 Film program: The Dutch Tradition and Rembrandt
vanRijn

Jan.24, 1945 The Documentary Films

Jan.27, 1945 Film program: New Zealand⁴

¹Free Summer Program of Varied Activities at the
Worcester Art Museum, p. 2-3, 1944.

²Worcester Art Museum News Bulletin and Calendar,
Vol. X, No. 2, p. 4, November, 1944.

³Worcester Art Museum News Bulletin and Calendar,
Vol. X, No. 3, p. 6, December, 1944.

⁴Worcester Art Museum News Bulletin and Calendar,
Vol. X, No. 4, p. 4, January, 1945.

Feb. 3, 1945 Film program on Norway: Before the Radi.
 Feb.10, 1945 Film program on the South Pacific: Moana
 Feb.17, 1945 Film program on Poland: Moonlight Sonata
 Feb.24, 1945 Film program on South Africa: Rhodes of Africa¹
 Mar. 3, 1945 Film Program: "One Day in the Soviet Union"
 Mar.17, 1945 Film Program on Latin America
 Mar.21, 1945 Films: "Moscow Circus and 1812"²

WAYS OF SEEING

In 1940, the Worcester Art Museum opened the exhibit "Ways of Seeing"³ a unique experiment in visual education designed to show the layman how artists express themselves by means of line, form, and color. This exhibit, representing a pioneer venture in museum education, consists of a series of dramatic displays explained through the use of low modulated loud speakers.

This program is open to the public. Teachers, particularly those of secondary schools, bring their classes to the Museum. About fifteen people can view this exhibit at one time; performances take twenty-five minutes, and can be repeated at twelve minute intervals.

¹Worcester Art Museum News Bulletin and Calendar, Vol. X, No. 5, p. 4, February, 1945.

²Worcester Art Museum News Bulletin and Calendar, Vol. X, No. 6, p. 4, March, 1945.

³"Ways of Seeing," pamphlet published by Worcester Art Museum.

Reservations are made one week in advance by telephoning or writing the Secretary for School Service, Worcester Art Museum.

RADIO WORK IN CONNECTION WITH
WORCESTER NATURAL HISTORY MUSEUM

In May 1945 the Worcester Natural History Society broadcast its 267th "Nature in New England" radio program over Station WTAG. The weekly radio talks covered all the fields of natural science and gardening.¹ Members of the lecture classes and clubs of the W.N.H.S. participated in the broadcasts when the programs applied to their particular subjects.

The program was devoted to the cause of Victory Gardens and gardening through the growing season. At the end of the garden season programs continued in the interpretative fields of natural science.

Every effort was made to see that almost no material presented over the radio was technical. Listener response was fairly continuous and indicated that a very substantial listening audience had been established.

In addition to the regular Sunday morning broadcasts,

¹Annual Report of the Worcester Natural History Society, 1944-1945, pp. 12-13.

a "Gardening for Victory" program was conducted by the director of the Museum over the same station, two, and sometimes three times each week from early spring through the fall. This was considered a large part of the Extension Service.

No record was kept by the broadcasting Station, but some of the typewritten copies were available at the museum. Following are the titles of available 9:45 A.M. broadcasts over Station WTAG in connection with the "Nature in New England" series from May 7, 1944 to May 1945:

NATURE IN NEW ENGLAND

Date	Subject
May 14, 1944	Society has its Roots in the Soil
" 21, 1944	Meteors - Shooting Stars
" 28, 1944	Comets
June 4, 1944	Opportunities Offered Children This Summer at the Natural History Museum
July 16, 1944	The Azalea and its Legends
" 23, 1944	The Spirea and its Legends
" 30, 1944	Lilacs - Their Origin and Legends
Aug. 6, 1944	Witch Hazel Finds a Well
" 13, 1944	Legends of Flowering Dogwood
Sep. 10, 1944	Astronomy - The Planets
" 17, 1944	Astronomy - The Moon
" 24, 1944	A Boy's Place in the Natural Sciences

Date	Subject
Oct. 1, 1944	Our Mammals
" 8, 1944	Changing Emphasis in Natural Science Museums-a.
" 15, 1944	Changing Emphasis in Natural Science Museums-b.
" 22, 1944	Soil and Society
" 29, 1944	Soil and Society
Nov. 5, 1944	Soil and Society
" 12, 1944	Soil and Society
Dec. 24, 1944	Plants that have Deep Association with Christmas
Dec. 31, 1944	Astronomical Events for 1945
Jan. 7, 1945	The Winter Evening Skies
" 14, 1945	Observation on Weather and its Courses - a.
" 21, 1945	Observation on Weather and its Courses - b.
" 28, 1945	"Trees" A Meditation
Feb. 4, 1945	The Food Relief Needs, Facing the UNRRA (United Nations Relief and Rehabilitation Administration)

RADIO WORK AT WORCESTER ART MUSEUM 1944

In a series of Holy Week programs, during the month of April, 1944, organ music, played by William Self, was broadcast over Station WTAG.¹

¹Worcester Art Museum Forty-ninth Annual Report, 1945,
p. 10.

WORCESTER ART MUSEUM

MUSIC

Music appreciation work was started at the Worcester Art Museum in 1919 with concerts and lectures on music for adults, and musical programs for young children and adolescents. In 1934 the Carnegie Corporation of New York gave seventy-five thousand dollars to the museum to enable it to carry on its music education, and for the purchase of additional materials for the record library.

The Worcester Art Museum auditorium is open from two to six o'clock on Sunday afternoons throughout the year for playing of recorded music, except when concerts, lectures, or films are scheduled.

Following are the planned programs for 1944-1945:

April 2, 1944 Concert: Jesus Maria Sanroma, piano.

April 18, 1944 Bach recital by Mr. William Self, organist of All Saints Church, Worcester. Mr. Self was appointed to the museum staff as organist for the year.

April 23, 1944 Concert: The Zighera Orchestra, composed of fourteen musicians from the Boston Symphony Orchestra.

April 25, 1944 Bach recital by Mr. Self.

April 26, 1944 Organ recital by Mr. Self.

May 7, 1944 Informal organ recital by Mr. Self.¹

Oct. 22, 29, 1944 Memorial Concerts for the late Joseph Bonnet,
who served as Museum organist in 1942-43.

The program consisted of compositions of
the old masters collected and edited by
Mr. Bonnet.

Nov. 14, 21, 28, 1944 Organ recital. Mr. William Self.

Dec. 24, 1944 Christmas concert: The Choir of
All Saints Church

Jan. 7, 21, 28, and Feb. 4, 1945 Organ concert: Mr. Self.

Jan. 14, 1945 Concert by Raya Garbousova, cellist.

Feb. 4, 1945 Organ recital: Mr. William Self

Feb. 11, 1945 Concert by the Lener String Quartet (Formed
in Budapest in 1919)

Mar. 4, 1945 Organ recital by Mr. William Self

Mar. 11, 1945 Concert: Ruth Posselt, violin.²

MUSEUM SERVICES

Besides opening its doors to students seeking material
for advanced college degrees, and to historians interested in

¹Worcester Art Museum News Bulletin and Calendar,
Vol. IX, No. 7, p. 4, April, 1944.

²The Worcester Art Museum Forty-ninth Annual Report,
1945, p. 16.



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using its vast library for study and research, the American Antiquarian Society has correspondence amounting to about fifteen thousand letters a year. With the exception of requests concerning genealogies all letters are answered as carefully as possible.

The American Antiquarian Society does not loan any of the objects from its mammoth collection but does allow the photographing of objects for publication. As a result numerous illustrated articles appear frequently in the Feature Parade of the Worcester Sunday Telegram.

The American Antiquarian Society also publishes "A Guide to the Resources of the American Antiquarian Society" which contains among other features, the Resources of the Library.

Two "Proceedings of the Society" are published each year and these contain lectures and monographs of historical importance, written by the leading historians of the country.

They include many titles on the history, archeology and linguistics of the American Indians, others on the development of New England, the Central States and the West, bibliographies of American newspapers to 1820, of New England almanacs, of early American periodicals, broadsides, cook-books, and of individual authors and localities.¹

The Transactions of the Society form another series of

¹A Guide to the Resources of the American Antiquarian Society, pp. 20, 21, Worcester: 1937.

publications and include a number of scholarly volumes of greater extent than the addresses found in the "Proceedings."

Papers read before the society, and lectures given have been reprinted in separate forms and these besides the other publications are available on request.¹

The Worcester Historical Society receives hundreds of letters yearly from all parts of the country concerning Worcester ancestors, or requesting historical information on Massachusetts, Worcester city, and county. These letters are answered as quickly as the small museum staff, or volunteer members of the Society can attend to them.

Fifty thousand bound volumes and pamphlets besides a well organized collection of over twenty thousand manuscripts, maps, broadsides, and newspapers are to be found in the library and are available for those interested in using them for historical research. No literature can be taken from the museum.

Loans of museum objects are made to department stores, churches, and to responsible organizations, and clubs, providing the objects will stand transportation to and from the museum.

¹Personal interview with Mr. Clarence Brigham, June 1946.

The "Worcester Historical Society Publications" are printed twice a year and contain historical addresses and lectures made at the meetings of the Society. These are available for public use.¹

NATURAL HISTORY SOCIETY

The trend of demand for services given by the Worcester Natural History Museum during the year 1944 - 1945, was noticeable in the field of economic agriculture. The greatest number of inquiries came in connection with insect pests in the home and garden, as well as plant diseases. There was an increasing trend of inquiries concerning landscaping and the use of shrubbery around the homeland. A great deal of information was also requested concerning the rehabilitation of lawns. The Extension services of the museum gave considerable help during the summer to various summer camps and to the Worcester State Hospital. The Fur and Feather Club, conducted by the Curator of Ornithology, David Weatherbee, furnished, through its training course in the winter, leaders for nature counsellors which served the boys and girls camps in and about Worcester county.

Many letters and telephone calls were received by the

¹Personal interviews with Mr. Waite and Mrs. Reid, March, 1946.

members of the museum staff concerning the identification of minerals and plants, insects, and animal life. Many called in person bringing the object to the museum for identification.¹

Several publications help to keep the Worcester public informed as to museum activities or give a bit of interesting information about natural history. These are listed below:

The Natch: A pamphlet published each month in the year with the exception of August and September, listing the classes, clubs, and numerous activities of the Children's Department at the Worcester Natural History Society. Several hundred copies are sent out monthly to museum members, schools, churches, libraries, boys and girls clubs and other organizations.

Nature Outlook: This is a nature magazine for adults and is published three times a year under the management of the Directors' Council and Editorial Board of the Worcester Natural History Society. The magazine contains nature articles that are written in an interesting and understandable style.²

All radio talks on "Nature in New England" are printed and copies are available upon request.

¹Personal interview with Mrs. Young, May, 1946.

²Personal interview with Mrs. Harris, November, 1945.

The Worcester Art Museum keeps the public informed as to its activities by mailing bulletins to members, schools, organizations, and clubs. Notices appear in the local newspapers when lectures, exhibits, classes, or concerts are to be held, and frequently illustrated articles tell something interesting and educational about some object from the museum's collection.

The following publications are sent to museum members: the Illustrated Annual; the News Bulletin and Calendar; the Annual Report.

A more detailed description of the loan service at the Worcester Art Museum and the Worcester Natural History Society will be found in Chapter V.

The Norton Hall Museum has exhibits for schools that consist of pictures, booklets, raw materials and finished products. Local banks and department stores have received these loans in connection with citywide industrial programs. In January, 1945, Norton Hall cooperated with the Worcester Art Museum in its special exhibition "This is Our Town" and contributed, besides pictures, a glass case of products in different stages of manufacture. Exhibits are also on loan at other museums. Several publications, including a twenty-seven page, illustrated booklet entitled "Abrasives - Their History and Development" are available upon request.¹

¹Personal interview with Mr. Swanstrom, May, 1946.

Medieval armor from the John Woodman Higgins Steel Museum are on loan at leading art museums in the country. This museum also contributed to the Worcester Art Museum's exhibit, "This is Our Town," in January, 1945, by loaning some of the most modern products of its plant.

The museum has an extensive library on medieval and modern books, and illustrations of iron and steel products. This library is open to the public during opening hours, but none of the library materials are circulated.

The publications include illustrated folders, pamphlets, and reprints of magazine articles about the museum and its collections. Following are some of the publications that are gratis: "The Worcester Pressed Steel Museum," "Vocations, Skills, and Brains," "Art in Industry," "Industrial Education and Industrial Museums," "The Forge of Vulcan," and the "Pageant of Steel."¹

¹Personal interview with Mr. Higgins, April, 1945.

CHAPTER V

CHILDREN'S ACTIVITIES AT THE WORCESTER MUSEUMS

During the past twenty-five years children's activities have become an important part of the museum's educational program. In some museums a great deal of educational work is carried on while in others the museum is simply a collection of objects on display.

Most of the young museum visitors go voluntarily to attend classes; hear the lectures; see the movies; participate in club activities; and to play the museum games.

The American Antiquarian Society does not belong to this group. It is definitely a library for adults, who visit for the purpose of getting historical data, or to do research work.¹

The Worcester Historical Society would like to carry on a program of planned activities for children, but feels it cannot due to cramped quarters, crowded, glass encased collections, and lack of personnel to guide visitors. It has limited its educational work to pre-arranged visits of small groups of school children; and to museum games.²

¹Personal interview with Mr. Clarence Brigham, June, 1945.

²Personal interview with Mr. Waite, June 1946.

During 1944-1945 a number of pupils wrote letters as part of their school work for the purpose of making individual and group appointments for museum visits.

One class of thirty-eight fourth grade pupils, wrote six letters giving the names of the small group of five or six children who were to visit after school hours to see the museum collection of colonial objects in connection with a study they were making on Colonial Life.

A very small part of the collection of the American Steel and Wire Company Industrial Museum, is now on display in a room at the Worcester Natural History Society. Here children watch the moving parts of the exhibit; read the labels; and listen to an explanation of the workings of the different models.¹

Plans for an educational program in connection with Worcester schools and children's organizations were suspended at the John Woodman Higgins Steel Museum at the start of World War II. At the present time, Mr. Charles Wilder, a former teacher and principal, has been put in charge of the museum's educational department, and he hopes to have some part of the children's educational program functioning early in 1947.²

¹Personal interview with Mr. Michael Roche, March 1945.

²Personal interview with Mr. Charles Wilder, June 1946.

Every day in the week, but especially on Saturdays, children of all ages and from all parts of the city visit the Worcester Natural History Society to attend classes; to see the exhibits; to join their particular club or hobby group; to browse through the collection of pictures or books; to identify some object that he or she has found; to see the movies; to put a picture puzzle together; and to plan a field trip.

Three years ago weather instruments were loaned to the museum by the United States Government Weather Bureau for the purpose of recording weather data in this area.¹ Under the direction of Mr. Paul Steele and Mr. Michael D. Roche groups of children observed the operations of weather instruments and were given instructions on the theories and data of weather recording. The most capable pupils in these groups later became class leaders and in turn taught small groups of three or four the principles that they had learned.

On April twentieth 1944, the entomological department began active operations with the opening of a workshop for boys and girls between the ages of twelve and eighteen. The aim of the workshop was to create and develop an interest in entomology and to provide an opportunity for those interested to learn

¹Annual Report of the Worcester Natural History Society, 1944-1945, pp. 14-15.

about the structure, habits, classification of insects, and also how to collect, identify, prepare and care for them as museum exhibits. Instruction consisted of informal talks and laboratory projects. As a part of the workshop, insects were prepared for the museum by boys and girls during the summer, and these became part of the collection for the entomological room.¹

During the "Cultural Exhibits," the Children's Curator conducted classes in geography and history at the museum on the countries that were represented in the project.

ONE YEAR OF PLANNED ACTIVITIES AT THE WORCESTER
NATURAL HISTORY SOCIETY

1944-1945

During the year 1944-1945 children's activities at the Worcester Natural History Society were varied, and carried on for the purpose of meeting the needs and interests of the different groups. Movies were shown on Saturday mornings; museum games were played; classes were conducted; clubs were organized; and tours and field trips were made to parks and wooded regions for the purpose of studying the many phases of natural history and natural science. As soon as interest in an activity or a club waned, a new one took its place.²

¹Ibid., p.38.

²Ibid., pp. 29-30.

The various clubs that functioned during the year 1944-45 were: Cardinal Bird Club, Insect Club, Shell Club, Wild Animal Club, Star Club, Stamp Club, Scrapbook Club, Seed Club, Tree Club, Chemistry Club, Germination Club, Mineral Club, Fur and Feather Club and the Christmas Workshop.

Junior assistants and leaders carried on the work at the museum under the direction of adult volunteer workers.

Following are the children's activities which were carried on at the museum for the year beginning June, 1944 and continuing through May, 1945:

CHILDREN'S ACTIVITIES

The museum summer school opened from July 10 - 27 and was in session four days a week for three weeks; thirty-five children registered. Following are the classes and activities in which the children participated:

June - July, 1944 Insect life, plant and pond life were studied in natural habitats; collections were made; and field trips in and out of the city were taken by the group.

June 17, 1944 - 10:00 A.M. Annual Pet Show

July 10 - 27, 1944 Summer School was conducted four days a week for three weeks, from Monday through Thursday, for children of school age.

July 10 - 13 Insect Life

July 17-20 Plant Life; Rocks and Minerals

July 24-27 Pond Life

Field trips were taken to Lake Park, Coes Pond, Silver Springs, Elm Park, Green Hill Quarry, and the Cascades.¹

Following are the class and club activities from October, 1944 through May, 1945 in which children participated:

October, 1944 During October, Saturday mornings were spent in playing Museum games and on outdoor nature scavenger hunts. Afternoons were devoted to nature walks to nearby parks and wooded areas.

Club Schedules for October, 1944

Tuesdays:	Girl Scouts	4:00 to 5:00 P.M.
Wednesdays:	Mineral Club	" " " "
	Seed Club (Oct. only)	" " " "
	Insect Club	" " " "
Thursdays:	Shell Club	" " " "
Fridays:	Miscroscope Club	" " 5:30 "
	Chemistry Club	5:30 " 6:30 "
Saturdays:	Fur and Feather Club	2:00 " 4:00 " ¹

November, 1944 Saturday mornings during November were devoted to Museum Games and outdoor nature walks. Afternoons, to nature walks in nearby parks.

¹The Natch, October, 1944.

Thurs., November 2, 1944 Stamp Club 4:30 - 5:30 P.M.

Fri., November 3, 1944 Star Club 4:00 - 5:00 P.M.

Tuesdays were reserved for Girl Scouts who met at the museum for special badge work.

CLUB SCHEDULES FOR NOVEMBER, 1944

Tuesdays: Girl Scouts 4:30 - 5:00 P.M.

Wednesdays: Mineral Club "

Seed Club (through Nov.) "

Thursdays: Shell Club

Stamp Club 4:30 - 5:30 P.M.

Fridays: Star Club 4:00 - 5:00 P.M.

Chemistry Club 5:30 - 6:30 P.M.

Saturdays: Fur and Feather Club 2:00 - 4:00 P.M.

December, 1944 - Club Schedules, same as November.

NEW CLUBS:

Wednesdays: Insect Club 4:00 - 5:00 P.M.

Thursdays: Cardinal Bird Club¹

December 16, 1945 Worcester Natural History Society's Annual Christmas Party for Children given by the C. T. Sherer Company at Loew's Poli Palace Theater 9:00 - 11:00 A.M.

December 20, 1945 Christmas Tree Party² - 4:00 P.M.

¹The Natch, November, 1944.

²The Natch, December, 1944.

JANUARY, 1945 NEW CLUBS:

Thursdays: Wild Animal Club 4:00 - 5:00 P.M.
 Saturdays: Scrap Book Club 2:00 - 4:00 P.M.¹

February, 1945 Clubs - same as January, 1945.

During February the germination of seeds such as beans, peas, corn and squash, were studied. These were planted indoors, and the different stages of growth watched and recorded.

During the winter, scouts prepared for their Proficiency Badges, "Land Animal Finder" and "Star Finder."²

March, 1945 CLUB SCHEDULES

NEW CLUBS

Wednesdays: Tree and Flower Club 4:00 - 5:00 P.M.
 Thursdays: Bird Club "

APRIL, 1945 CLUB SCHEDULES

Tuesdays: Girl Scouts 4:00 - 5:00 P.M.
 Wednesdays: Mineral Club, Tree Club "
 Thursdays: Insect Club, Bird Club "
 Stamp Club 4:30 - 5:30
 Fridays: Germination of Seeds,
 Animal Club 4:00 - 5:00
 Saturdays: Scrapbook Club 2:00 - 4:00³

¹The Natch, January, 1945.

²The Natch, February, 1945.

³The Natch, April, 1945.

May, 1945 - On Saturday mornings in May outdoor walks were taken for the purpose of studying and observing the outdoor life of plants and animals. Rocks, minerals and other natural history objects found out of doors were also studied.

CLUB SCHEDULES

Tuesdays:	Girl Scouts	4:00 - 5:00 P.M.
Wednesdays:	Rock and Mineral Club	" "
	Outdoor Walks	" "
Thursdays:	Bird Club	" "
	Insect Club	" "
Saturdays:	Outdoor Walks	10:00 - 11:00 A.M.
	Scrapbook Club	2:00 - 4:00 P.M. ¹

"WORCESTER AND THE WORLD" PROGRAM

From October 7, 1944 through March 17, 1945 weekly classes for children were held at the Worcester Natural History Society to study the geography of our Allies in World War II in connection with the radio project of the Worcester radio station WTAG.²

Many exhibits of the arts and crafts of each country along with posters and pictures were displayed at the museum.

¹The Natch, May, 1945.

²Annual Report of the Worcester Natural History Society 1944-1945, pp. 10-11.

A weekly quizz was prepared for the class and in this way the children learned about each country's resources, industries, and culture.

Pictures of the Quizz Hour classes appeared in the Worcester Telegram, the Christian Science Monitor, and the New York Times. The highlight of the project came when the children broadcast to Norway.

Following is a list of the countries studied:¹

Australia	Latin America	France
Czecho-Slovakia	Denmark	Luxembourg
Greece	India	Philippines
New Zealand	Norway	USS Russia
Union of South Africa	Canada	Great Britain
Netherlands	Poland	Yugo-Slavia

CHILDREN'S ACTIVITIES

At the Worcester Natural History Society, the Stamp Club, under the direction of Mr. Morton M. Miller, studied the stamps of the following countries in connection with the WTAG program "Worcester and the World" during 1944 and 1945:

Netherlands and its colonies

France and its colonies

Denmark and its colonies

¹Ibid., pp. 30-31.

Italy and its possessions in Africa
Spain and Portugal
Germany and Switzerland
(British Empire: England, Ireland, Canada, and
(Newfoundland, Australia and New Zeland, South
(Africa and India
Austria and Hungary
British Colonies in the West Indies¹

The children's Scrapbook Club made scrapbooks for children in the Isolation Department of Worcester Belmont Hospital, and the liberated countries in Europe. When finished the books were distributed through the American Red Cross.²

CHILDREN'S MOVING PICTURE PROGRAM AT THE WORCESTER
NATURAL HISTORY SOCIETY, 1944 - 1945

Every Saturday morning at eleven o'clock, moving pictures for children were shown at the Worcester Natural History Society, from November 4, 1944 through April 28, 1945. Sound pictures also were shown in connection with the WTAG project, "Worcester and the World."

¹Personal interview with Mr. Michael Roche, February, 1945.

²Personal interview with Mrs. Harris, November, 1945.

November 4, 1944	Steam Locomotive Defense Against Invasion Pan American Bazaar
November 18, 1944	Mexico City Monuments of Mexico Mexican Children
November 25, 1944	Brazilian Quartz Goes to War Brazil Brazil's Fishing School ¹
December 2, 1944	The Three Little Kittens Gray Squirrel How Nature Protects Animals
December 9, 1944	High Over the Borders The Changing Face of India The Handymen Our Heritage
December 16, 1944	The Pilot is Safe Convoy from India Land of Five Rivers She Serves Abroad Handicrafts of India
December 23, 1944	Jerry Pulls the Strings

¹The Natch, November, 1944.

December 30, 1944	The Grain that Made a Hemisphere Shock Troops ¹
January 6, 1945	Handle with Care
January 20, 1945	Rayon
January 27, 1945	Britain's Paratroops Water, Friend or Enemy Wings for Norway ²
February 3, 1945	Young Uruguay All Out for Victory New Zealand
February 10, 1945	Sicily The Bridge Food Magic
February 17, 1945	Poland Forever Manufactured Abrasives
February 24, 1945	High Plains Synthetic Rubber ³
March 3, 1945	Freedom Comes High South Africa
March 10, 1945	The Bounteous Earth
March 17, 1945	Explorers of the World

¹The Natch, December, 1944.

²The Natch, January, 1945.

³The Natch, February, 1945.

March 24, 1945 The Dutch Tradition
March 31, 1945 Combat America
Russia at the Front¹
April 7, 1945 "We Said We'd Come Back"
"Here is China"
"Life of Plants"
April 14, 1945 "Pincers on Japan"
"America Can Give It"
"Harvests for Tomorrow"
April 21, 1945 "Salute to Farmers"
"The River"
April 28, 1945 "Survival of the Fittest"
"Day of Battle"
"Sicily"²

CHILDREN'S CLASSES AT THE WORCESTER ART MUSEUM

During the year beginning in October 1944 and ending in May 1945, young people from every part of the city, and representing all nationalities attended the art classes at the Worcester Art Museum. The classes were conducted in a very democratic way and children were classified according to age

¹The Natch, March, 1945.

²The Natch, April, 1945.

and previous experience. The children of doctors, lawyers and business executives worked side by side with the children of factory workers, mechanics, and truck drivers.¹

The methods of teaching were more flexible than in the past and depended greatly on the personality of the teacher, the child, and the situation. A definite procedure was followed by the instructor for each age group, and lessons were planned, and varieties of techniques were employed: a demonstration by the instructor; a visit to the galleries; the use of slides; photographs; musical recordings; and the discussion of a specific problem. The Museum and its objects were used to broaden and enrich the lesson, but no limitation was placed either on the teacher or child if inspiration was sought outside the museum.

From October 7, 1944 through May 26, 1945 weekly classes for children were conducted at the Museum. Following are the age groups, days and hours on which these classes met:

¹ A Generation of Art Education for Children at the Worcester Art Museum, 1946, pp. 10-16.

TABLE IV

SCHEDULE OF WEEKLY CLASSES FOR CHILDREN AT THE
WORCESTER ART MUSEUM

Day	Time	Age	Class
Saturday	9:15-10:00	3-5 years	Nursery
"	9:15-12:00	6-8 "	Primary
"	9:15-12:00	9-11 "	Elementary
"	9:15-12:00	12-14 "	Elementary
Wednesday	3:00	15-18 "	High School
Saturday	9:00-12:00	" "	Advanced "

The three year olds in the nursery class spent most of the short period in aimless scribbling, amounting to little more than muscular movements, stemming from the shoulder rather than from the wrist; or modeling with clay.

Classes were small, and periods short, and no attempt was made to give these youngsters formal instruction.

The five year olds responded somewhat to formal instruction, and the lessons were explained in greater detail and with much repetition. Drawing followed immediately since interest span for this group was of short duration.

The six through eight year olds were given some formal

lessons and encouraged to find what they "liked" in other children's drawings.

Children between the ages of nine to eleven thought largely in terms of group activity, and this was reflected in their work. At this level landscapes were attempted and interest was shown in three dimensional work.

The group between twelve and fourteen years of age were more critical of their work and compared their achievements with those of their neighbors.

The fifteen through eighteen year olds were made up principally of young people who came up from the elementary classes. These children had acquired some skill in the handling of materials and showed an interest in experimenting with new techniques. Their work reflected a more developed taste conditioned by years of teaching based on art appreciation. At this period they were given help in understanding the intellectual and scientific problems of perception, perspective, color and light.

The advanced high school group was made up of pupils who were almost professionally interested in art. While the objectives and methods were the same more emphasis was placed on techniques, and there was greater opportunity for individual experimentation. During the first four months of the year this class was trained in the basic fundamentals of picture making:

line, pattern, color, and form. Later the pupils analyzed the works of old masters, looking for these elements and learning to use them in organizing nature in the form of still life, portrait, and figure drawing.

EXHIBITS FOR CHILDREN AT THE WORCESTER ART MUSEUM

The following children's exhibitions were held in the Children's Studio at the Worcester Art Museum during 1944-1945:

August, 1944	Two Exhibits:
	Cowboys and Indians
	The Art of Games
November 11, 1944 - through December, 1944 -	Horses
December 16, 1944 - through January 13, 1945 -	Madonnas ¹

MUSEUM WORK IN CONNECTION WITH SCHOOLS

Sixth Grade Guidances at the Worcester Art Museum

One of the most rewarding projects undertaken at the Worcester Art Museum in connection with the public schools is the work with the sixth grades of the city. A series of Study Sheets were prepared with the cooperation of the Director of Art

¹The Worcester Art Museum Forty-ninth Annual Report, 1945, p. 17.

of the Worcester Public Schools, on which were reproduced objects of the Museum's collections. In connection with this visual material the School Department prepared a pamphlet explaining the objects in language that was easily understood by children of each grade level. These were studied and when the children reached Grade VI, they visited the Museum for gallery discussion of the objects with which they had become familiar.

During the year 1944-1945, about three thousand sixth graders, accompanied by their teachers, visited the museum during school hours, according to the schedule planned by Mr. Leo Doherty, Director of Art in the Worcester Public Schools.

In 1937 these sixth grade guidances were written into the Art Course of Study of the Worcester Public Schools.

Occasionally children wrote unsolicited letters after their visit and following are a few excerpts from letters received by the Museum:

The thing I liked best was 'The Figure of a Grave Relief.' The reason why I am so interested in this statue is because it came from my own country, Greece. I am interested in statues from my country.

I liked the way you explained everything to us that we didn't understand. I got a thrill from the museum because it was the first time I was there....

...I thought you would never come to 'The Card Player.' The reason I like this was because I wrote a very nice story about 'The Card Player' for English one day. I noticed in his

face how deep he is thinking before throwing down his cards.¹

LOAN DIVISION: WORCESTER NATURAL HISTORY SOCIETY

During the war much of the work with the Worcester school system was suspended. Transportation of children to the museum was restricted, due to gasoline rationing and man power shortages. Some of the work of the Children's Loan Extension Division, however, still was carried on, because of the volunteer workers who used their cars to deliver and pick up the materials. Over six hundred loans were sent out to schools and other organizations. These consisted of birds, minerals, animals, books, maps, magazines, charts, slides, weather maps, weather flags, pictures, curios, and loan boxes.²

Following are some of the loans available in 1944-1945:

1. Circulation of four hundred books from the Children's Library.
2. Contributions of pictures for scrap books on subjects pertaining to natural science and natural history.
3. Stuffed birds and mammals, accompanied by texts, habitat pictures and nesting sights of birds.

¹"Relation with the Public Schools." A Generation of Art Education at the Worcester Art Museum, pp. 19-22, 1946.

²Annual Report of the Worcester Natural History Society, 1944-1945, pp. 33-35.

4. National Geographic pictures for weekly exhibits in connection with radio program on the countries of our war Allies.
5. Maps
6. Articles from National Geographics and Natural History Magazines concerning people of other nations, for the use of children and teachers, in geography.
7. Loan Boxes were sent to twenty-nine school buildings, public and parochial, once a month throughout the school year as well as to other organizations, and individuals. These included libraries, recreation centers, summer camps, colleges, graded schools, Junior and Senior High Schools, and Museum Clubs.

Schools outside Worcester are invited to borrow the Loan Boxes provided they take care of the transportation to and from the schools. Only one school outside of Worcester, the Oxford High School, has taken advantage of the Loan system.

The purposes of the Loan Exhibits are several, among them being an attempt:¹

¹Annual Report of the Worcester Natural History Society 1943-1944, pp. 17-19.

1. To afford teachers, materials which will enhance their children's understanding and interest in science and geography.
2. To stimulate children's powers of observation in order to interpret better what they see in everyday life.
3. To acquaint young people with the industries which utilize the natural resources of the world.
4. To show children how the raw materials of each nation may be important to the world as a whole.
5. To train children to love and appreciate the beautiful things found everywhere around them outdoors, and to teach them to conserve these and other natural resources in order that the greatest number of people may use and enjoy them.

Every conceivable item that is available and interesting to the teacher or child is added to the boxes. Thus, the teacher can have a wider choice in connection with whatever science program she has already started in her room. An abundance of material allows for the differences in ages of the children. Several grades in the same school use the box, which is usually

kept for one month, the limit of the time allowed.

An inventory is taken of each box and enclosed for the use of the teacher. Also enclosed is a bibliography, and suggestions for the best use of the box.

Following are the loan boxes now available for distribution:¹

Waterlife: Amphibious

Weather: (Closed Box used in connection with the study of winds, temperature, and different types of clouds)

Animals: Prehistoric and Fossils

Texts, illustrations, real specimens, and colored pictures, accompany this box which can be of service in the Intermediate and Junior High Schools.

Animals: Real, mounted of New England.

Several boxes are available and with two or three animals to each box with texts, etc. For use in primary, intermediate and junior high classes.

Birds, Real, Mounted, New England: Several boxes with two or four birds in each - with text, etc. For primary, intermediate and junior high level.

Birds, Year-Round, New England: Two boxes with colored and black and white photographs of the birds; other illus-

¹Nature Outlook, Vol. III, No. 1, pp. 31-35, November, 1944.

trations, texts, and stories. For use in primary, intermediate and junior high schools.

Clouds,- their formation and identification.

Texts and illustrations

For intermediate and junior high schools.

Cattle Industry: The story of the cattle industry is developed through series of large photographs, other illustrative materials and texts. For use in the intermediate and junior high schools.

Cotton Industry: The story of the cotton industry developed through a series of photographs, texts and varied kinds of other illustrations in both two and three dimensions. For primary, intermediate, and junior high school level.

Coal Industry: The story of the coal industry through the use of texts, large photographs, and various other illustrations, including actual specimens of the different kinds of coal. For use from the third grade level through the intermediate and junior high school.

Fur Industry: The story develops through the use of various kinds of pictures, real fur samples, maps, pictures, in color, of animals from which fur comes and texts, etc. For use in the third grade, through the intermediate and junior high school.

Fisheries Industry: The story of the fishing industry is developed through the use of a series of large photographs and other illustrations and texts. For intermediate and junior high schools.

Insects: Miscellaneous insects, except fresh water life, butterflies, and moths. The box contains many illustrations and texts. For primary, intermediate and junior high schools.

Lumber Industry: For intermediate and junior high schools.

Mammals, New England, Number One.

Various kinds of mammals of New England shown in color and black and white illustrations. This collection is made largely of photographs with texts and can be used in the primary, intermediate and junior high schools.

Mammals, New England, Number Two.

This box is similar to that described above but contains different mammals.

Minerals, Number One. Miscellaneous.

This box contains specimens found in New England, texts, and illustrations. For intermediate and junior high school use.

Minerals, Number Two. Similar to above.

Ores: Tin, Iron, Aluminum, Copper.

This box contains mounted specimens, illustrations, and texts. For intermediate and junior high schools.

Rain and Snow: This box contains information concerning rain and snow and is illustrated, profusely. For primary and intermediate grades.

Rubber: The story of rubber is told through texts and large mounted photographs in color and in black and white. There are also samples of synthetic and natural rubber, and their products. For use from the third grade, through the junior high school.

Seeds: Actual specimens, illustrations, and texts. For primary intermediate and junior high schools.

Sea Life, small (Large box)

Many beautiful color plates; mostly of Atlantic and Gulf Coasts of the United States, and real specimens. For primary, intermediate and junior high schools.

Sea Life, small (Small box)

Actual specimens of more fragile sea life, set into cotton and covered with cellophane from the Atlantic Pacific and Gulf coasts of the United States. Texts are also included.

Shells, Sea. This box contains actual specimens and photographs of shells found on the Atlantic and Gulf coasts. Included are fresh water and pearl shells. For use in the primary, intermediate and junior high schools.

Silk Industry: The story of the silk industry in Japan before World War II. The box contains colored illustrations and specimens showing the development of silk. For intermediate and junior high school use.

Stars: "Beyond Solar System - (planets not included) Stars and Constellations" This box contains texts and various illustrative materials, for use in the intermediate and junior high schools.

Wool Industry: The story of the wool industry is told in a series of photographs, texts and all kinds of illustrations. For use from the third grade, through the intermediate, and junior high schools.

Excerpts from the following letter received at the Worcester Natural History Society show the number of uses which were made of a loan box exhibit in an elementary school:¹

The Nature Study box of Clouds and Stars proved interesting and helpful to the entire building. First, the Cloud Charts, and later the Star Charts were placed in the lower corridor. These proved interesting to the visitors who passed through, as well as the children of all the grades, also the girls from the State Teachers College, who came for observation classes.

The Star Charts came in time to be used

¹Annual Report of the Worcester Natural History Society 1943-1944, pp. 19-20.

1870-1871

1871-1872

1872-1873

1873-1874

1874-1875

1875-1876

1876-1877

1877-1878

1878-1879

1879-1880

1880-1881

1881-1882

1882-1883

as a review in Grade 6-1. Many of these children had made Star Maps which they placed over an opening in a box. In the box, and behind the map or chart was placed a lighted electric light bulb.

The charts were also used in lessons in Grade 3, in connection with the study of the sun, moon, wind and points of the compass.

Grade 1-1 used the charts in connection with a lesson in the Weekly Reader on Clouds.

Other grades which used them were Grade 4-1; science work in Grades 6-1 and 6-2; the weather study in Grade 8-1.

EXHIBITIONS OF GENERAL CULTURAL INTEREST FOR SECONDARY SCHOOLS AT THE WORCESTER ART MUSEUM

A series of circulating exhibitions were arranged by the Worcester Art Museum under a grant from the Carnegie Corporation, based upon the curriculum and the reading requirements of the average high school. They complemented the work of the classroom and attempted to provide a background for the humanistic subjects studied in the secondary schools. In every instance, emphasis was placed upon subject matter, but the artistic quality of the subjects was of the highest order.¹

In cooperation with the New England Arts Association of Preparatory Schools for Boys, an organization formed in 1936, these interpretive exhibitions were sent to the following pri-

¹Exhibitions of General Cultural Interest for Secondary Schools, folder printed and distributed by the Worcester Art Museum.

vate schools: Andover, Exeter, Groton, Middlesex, St. Mark's, St. Paul's and Williston. However, these sets were not limited to New England, and loans have been shipped to all parts of the country.

These exhibitions were loaned free of charge with the exhibitions paying the express charges for transportation. In case of multiple requests for an exhibition preference was given to schools in Worcester county.¹ Following are the titles and descriptions of the exhibitions that were available during 1944-1945: "Art and Life of Ancient Egypt": 49 mounted photographs planned to illustrate the daily life of the ancient Egyptians, with emphasis on the religious and cultural background of the time.

The Homeric Poems: 21 mounted photographs illustrating the civilizations of Troy, Mycenae and Tiryns as described by Homer in the Odyssey and Iliad.

Greece in the Time of Pericles: 22 mounted photographs of the Acropolis showing Athens as it was rebuilt under the leadership of Pericles after the Persian wars. Includes details of sculpture and views of various orders of Greek architecture as seen in the Propylaea, Erectheion and Parthenon.

¹Personal Interview with Mrs. Minnie Levenson, June, 1945.

Virgil: 18 mounted photographs consisting of contemporary portraits of Virgil with pictures illustrating various well-known portions of the Aeneid. The influences of this poem are traced through the Middle Ages and Renaissance to the invention of printing.

Latin Life in the time of Virgil: 18 mounted photographs describing life in Roman communities as seen in the streets, houses, public buildings, wall paintings, etc. found in Pompeii and Herculaneum.

Bible Illustrations from the Earliest Times to the Renaissance: This is a very colorful exhibition showing the development of religious and artistic expression portrayed in the illuminations of famous manuscripts of the Vth to the XIIIth Century. 36 mounted reproductions.

The Minnesingers: This is a small but colorful exhibit containing illustrations taken from the Great Heidelberg Manuscript of the XIIIth century.

Chivalry & Courtly Life in the Middle Ages: A colorful exhibition which describes the secular and ecclesiastical traditions of Europe in the Middle Ages by means of illuminations, drawings, and tapestries of the time. 31 mounted photographs.

Mediaeval Life of the People: 26 mounted photographs describing the life of the common people as reflected in the tapestries, stained glass, illuminations and Calendar pictures.

Mediaeval Minor Arts: This is a very colorful exhibition showing the various media employed to recount biblical history. It includes examples of stained glass, enamel, metalwork, tapestries, textiles, ivories, and illuminations. 36 mounted photographs.

The Bayeux Tapestry: 17 large mounted color reproductions of the famous tapestry portraying the history of Duke Williams' conquest of England and giving a continuous view of the entire embroidery.

Shakespeare and Tudor England: 26 mounted photographs stressing the literary life of XVIth Century England. Views of various theaters and portraits of important people by Holbein and others are included.

LeGrand Siecle: This exhibit describes XVIIth Century France and includes many engravings from the plays of Moliere, Corneille, Cardinal de Richelieu and Voltaire. 34 mounted photographs.

The French Revolution: A documentary exhibition consisting of contemporary paintings and engravings which portray the important historical characters and events of the Revolution. 29 mounted photographs.

American Art of the Colonies and Early Republic: 36 mounted photographs tracing the development of early American Architecture and furniture. Includes paintings and drawings by Badger, Gullager, Copley, Stuart and others.

Mohammedan Art: 25 mounted reproductions showing the most significant developments of miniature painting in the Near East from the XVth to the XVIth Century.

Far Eastern Art: 36 mounted photographs giving a broad view of the artistic traditions of China from the IVth to the XIXth Century.

Development of Modern Painting: 26 framed color reproductions selected to show the development of modern painting from the XVIth Century to the present time. Weight 400 pounds.

Worcester Architecture: A group of 76 photographs of examples of Worcester architecture from 1720 to the twentieth century. Includes simple farm houses of the early settlers, dwelling houses, churches, commercial structures and public buildings. Organized with explanatory text, by Henry-Russell Hitchcock, Jr. Professor of Architecture, Wesleyan University.

Work from the Art Classes of the Worcester Art Museum: A selected group of pencil and crayon drawings, watercolor paintings, and linoleum prints made by children (ages 3-17) attending the classes in Creative Design of the Worcester Art Museum. This exhibit attempts to show the results of the museum's method of art instruction

wherein emphasis is placed upon appreciation and creative and critical interpretation of design rather than upon formal art teaching.

War in Art: Reproductions. Small exhibition consisting of three plywood panels.

Abstract Art: Reproductions. (Same as above)

Latin American Art: Reproductions (Same as above)

Work of the Students of the Worcester Art Museum School:

Original material.¹

A record of the loans circulated during 1944-1945 was not available for publication.

OTHER LOAN MATERIALS AT WORCESTER ART MUSEUM

During 1944-1945, the Worcester Art Museum had other loan materials available for public use as follows:²

TABLE V

OTHER LOAN MATERIALS AT WORCESTER ART MUSEUM 1944-1945

Books	13,763	Lantern Slides	17,288
Pamphlets	3,078		
Photographs and Color Reproductions	27,882	Music Records	1,085

¹Exhibitions of General Cultural Interest for Secondary Schools (folder printed and distributed by the Worcester Art Museum.)

²Personal interview with Miss Mundt, October, 1945.

Circulation of loan materials from April 1, 1944 through March 31, 1945 were as follows:

TABLE VI

LOAN MATERIALS CIRCULATED DURING 1944 - 1945
WORCESTER ART MUSEUM

Books and pamphlets	1667
Photographs and Color Reproductions	2291
Lantern Slides	7659
Music Records	950

Music instructors of Worcester and Worcester County lean heavily upon the museum's collection of musical recordship for their work in music appreciation.

SUMMER ACTIVITIES FOR CHILDREN AT THE WORCESTER MUSEUMS

Nature Training School of the Worcester Natural History Society

The fourth season of the Nature Training School of the Worcester Natural History Society opened on June 26, 1944, at "Potteracres" in Auburn, with an enrollment of eighty children between the ages of nine and fifteen. Forty-one of the children had been awarded scholarships by organizations or private individuals. The popularity of the school is evidenced by the number of scholarships given by people interested in doing something for children's education in natural science.¹

¹Annual Report of the Worcester Natural History Society 1944-1945, p.36.

The school was conducted during the summer under the direction of Miss Anna Marie O'Connor. Four children from the school were appointed as junior assistants and paid a modest sum for their work as counselors. Training given the children at the school enabled them to become leaders of groups.

There were three sessions of three weeks each and the program included instruction in various fields of nature.

Ferns were studied during field trips and collections were made after demonstrations were given on how to preserve specimens.

Rocks and minerals were studied under the guidance of Dean Homer P. Little of Clark University, and more than three dozen collections were made and labeled.

Instruction on grasses was given by Mrs. Dorothy Lowell Salter.

In August mushrooms were studied and a mushroom garden planted in peat moss was made by the children.

Other nature subjects studied were bees, native mollusks, and trees.

Besides caring for a Victory Garden, the children studied land and water insects, birds, and small mammals, flowers, mosses, weather and stars. Of special interest were projects which included surveys of the pond and cedar swamps; the building of an outdoor aquarium; and the construction of an open air theater, "Care-Away Valley."

Time was also devoted to the playing of nature games, which the children enjoyed, and from which they derived educational values.

Many of the activities included field trips. Several trips were made to a cedar swamp and ponds where crayfish mounds were located and several species of salamanders captured. Tree surveys were made to find which kinds of trees were predominant in the areas.

The Weather Club¹ met daily at the museum with Mr. Paul Steele to record the temperature and barometric pressure; to make forecasts for the next twenty-four hours; and to put up weather flags.

Bird banding and mammal study were carried on under the guidance of David Wetherbee. A survey of the cedar swamp included identifying insects and other animals, mosses, ferns, and trees. A pond survey consisted of making a map of the trees bordering Horseshoe Pond, as well as listing the plants and animals which were found in the pond. A chart was made showing different types of seeds and fruits collected on the school site.

An open air theater was constructed in a little natural hollow by the children. Here by the light of a campfire

¹Annual Report of the Worcester Natural History Society 1943-1944, p. 10.

closing exercises of the season were held.

Another outstanding project was the construction of an outdoor aquarium. This was built by cementing a semi-circular formation of rocks, with a piece of plate glass forming the upper part of the outer side. Peat moss, ferns, rushes, and smaller water plants were placed in the aquarium, and painted turtles, tadpoles, kivvers and many water insects were soon happily at home there.

It was evident that the influence of the nature Training School was felt in other places as the Director of the Worcester Natural History Society was asked by the Secretary of the Massachusetts Horticultural Society to conduct a conference in Boston at the Society's building and to outline for them a children's program based upon the program at the Museum and the Garden City work in Worcester.¹

SCHOOL OF NATURE AND RELIGION
OF THE
WORCESTER NATURAL HISTORY SOCIETY

A school of Nature and Religion was also conducted by the Worcester Natural History Society during the summer of 1944, in cooperation with the Worcester Council of Churches and the City Missionary Society. The children met at wooded areas adjacent to the city and available by bus.

¹Nature Outlook, Vol. III, No. 2, p. 28, February, 1945

Religious training of pupils was given by representatives from the different churches, and the natural science work was carried out by a member of the Museum staff or by volunteers.

The object of this school was to give children who could not otherwise go to camp, an outdoor experience with nature science.

In the morning sessions, field trips to wooded areas were made, while in the afternoon the children did project work with the material collected on their morning nature walk. The late afternoon was devoted to religious work of the church groups.

During the summer of 1944, the first outdoor school was opened from June twenty-six through June thirty and an average attendance of fifty children was recorded. The second outdoor school opened from July third through July seventh with an aggregate attendance of two hundred ten children.

Two five day schools of Nature and Religion were opened on July 3, 1944 in the towns of Millbury and West Boylston and were sponsored for children between the ages of nine and fifteen years. Classes in West Boylston were open to children from the surrounding towns of Holden and Lancaster.¹

¹Annual Report of the Worcester Natural History Society 1944-1945, pp. 6-7.

CHILD CARE CENTERS

From July 24, 1944 to August 31, 1944, the children's curator at the Worcester Natural History Society was nature instructor at the six Worcester Child Care Centers. These Centers were financed by Federal Funds under the Lanham Act, and by the City of Worcester and directed by the Worcester School Department. They were located in the following school buildings in the city: the Cambridge Street, Maywood Street, Ward Street, Lamartine Street, Providence Street, and the Gage Street Schools.

Each center was visited several times a week and Nature Study taught under the direction of a member of the Worcester Natural History Museum staff.

Once a week classes of about twenty-three children spent a day at Silver Springs Park or at a park, or fields near the schools to study nature out-of-doors.

At the Open House program held at each Center at the close of the season, nature exhibits showing the work done by the children, were displayed. The work done at the various Centers must have made a lasting impression on many of the children because they became regular attendants at the Museum after the closing of the Child Care Centers.¹

¹Annual Report of the Worcester Natural History Society 1943-1944, p. 6.

SUMMER CLASSES FOR CHILDREN
AT THE
WORCESTER ART MUSEUM 1944

During the summer of 1944 classes in water color, gallery drawing, block printing and modeling were conducted for children between the ages of three to seventeen at the Worcester Art Museum. Classes were started on Monday, June twenty-six and ended on Friday, July twenty-eight. From Monday through Friday daily classes were held from nine fifteen o'clock in the morning until four o'clock in the afternoon.

Classes were divided into age and experience groups similar to those conducted during the months from October to May.

The Children's Studio was open on Saturdays and Sundays between two and five o'clock for informal activities.

The Studio was furnished with books, a phonograph and records, paper, crayons, and clay for modeling. An attendant was always present during open hours, but supervision was given only when requested.

During the month of August the Children's Studio was open for informal activities from Monday through Friday from two to five o'clock. Drawing, modeling, the playing of recorded music, and games were the most popular activities in

which the children participated.¹

CHILDREN'S FILMS AT THE WORCESTER ART MUSEUM 1944

Following are the names and dates of motion picture films shown at the Worcester Art Museum during July and August 1944. The summer films were arranged by the Educational Department of the Museum for children from five to ten years of age.

July 5	Farm Animals
	Colonial Children
July 12	Let's Go to the Zoo
	An Airplane Trip
July 19	Black Bear Twins
	French-Canadian Children
July 26	Elephants
	Navaho Children
Aug. 2	Animals of the Zoo
	Eskimo Children
Aug. 9	The Horse
	Passenger Train
Aug. 16	Animals in Modern Life
	The Policeman
Aug. 23	Goats
	Mexican Children

¹"Free Classes in Creative Design for Children," School of the Worcester Art Museum, p. 14, 1944-1945.

Aug. 30 Adventures of Bunny Rabbit
Children of China¹

MUSEUM GAMES

Several Worcester museums have taken advantage of teaching real facts to children through the use of museum games. Most of the games are based on museum exhibits and labels and may be played by groups of children or individuals at any time they wish.

In order to help children become better acquainted with the Worcester Natural History Society's collections, a game called "Museum Trails" was played on Saturday mornings before the showing of films. The children taking part in the game received slips of paper containing questions, the answers to which they could find in the various exhibits, throughout the museum. Some of the different types of questions for which the children searched for answers follow:

MUSEUM TRAILS

Where does the Swordfish get its name?

(Reptile Room)

The snapping turtle depends on its _____ for protection.

¹Bulletin: Free Summer Program of Varied Activities for Children at the Worcester Art Museum, pp. 2-3, 1944.

Does the Quail have well-developed feet?

(See case "How Birds are Made")

Where are Conch shells found?

Name three ores containing iron.

Bauxite is the source of what material used in airplanes, autos, and cooking utensils.¹

After the study of plants a race called "Names of Plants" was held by the class to find who could finish first in identifying the list of fifty plants.

Following are the directions for playing the game and a few samples of the plants to be identified:

NAMES OF PLANTS

Many plants take part of their popular name from some bird, mammal, fish, reptile or other animal, as, for example, CATTAIL. In the list below the missing words are represented by stars, one for each letter. Replace the stars with the missing letters to make up the name of the animal.²

*****cabbage

***glove

*****lily

*****laurel

***slip

***balm

**eye

*****quarters

***grass

****spur

¹Personal interview with Mrs. Young, June, 1946.

²Typewritten sheet entitled "Names of Plants"

A contest called "Discovery Walk" can be played while on field trips during spring, summer or autumn. For this game each child was provided with a paper bag on which was fastened a sheet of paper listing the objects which the children were to find and place in the bag.

Following are the directions and several of the articles to find:¹

DISCOVERY WALK FOR SPRING, SUMMER AND AUTUMN MONTHS

1. Below are listed some interesting "discoveries."
2. You are supposed to find these things.
3. We shall give you a certain time to find these things, so work as fast as possible.
4. When you see a "discovery", collect it and put it in your "Discovery Bag."
5. When the whistle blows return quickly. The one with the most correct discoveries wins.

* * * * *

A 6-legged creature

A maple leaf

A weed

A grasshopper

2 different kinds of seeds

Some needles from a pine tree

¹Typewritten sheet entitled "Discovery Walk."

At the Worcester Art Museum the game "Treasure Hunt I" begins with a set of ten simple multiple choice questions. Each set is more difficult than the one preceding it, and the problems call for an application of the knowledge acquired in the art classes, gallery talks, or observation of museum collections. The following are directions and examples for the games "Treasure Hunt I" and "Treasure Hunt II":¹

TREASURE HUNT I

All these questions refer to objects we have studied in the galleries. Go back and look at these objects again. Then put a check ✓ beside the correct answers.

1. The Assyrian god is an example of sculpture
 - a) In the round
 - b) In low relief
 - c) In high relief
2. The mosaics were used to
 - a) Keep out the cold
 - b) Pave courtyards
 - c) Decorate tombs
3. The figure of the hunter is larger than the other figures in the Egyptian relief because
 - a) He was a very tall man
 - b) He was a very important man
 - c) He is standing in front of the others

¹Typewritten Sheet "Treasure Hunt I"

4. The armor was made in small pieces so that

- a) It could be cleaned easily
- b) It could be put away easily
- c) The knight could move easily

TREASURE HUNT II

Fill the blanks with the word or words that complete the statement.

1. Tapestries were used in the Middle Ages for the purpose of _____.
2. In the painting by Marten van Cleve, the people are busily engaged in _____.
3. In the painting of the Coronation of the Emperor Frederick, the most important colors are _____ and _____.
4. The French painter who lived and painted in the South Sea Islands was _____.
5. a) A picture which is painted very smoothly is _____
by _____.
- b) A more roughly painted picture is _____
by _____.

The Worcester Historical Society's only game is called the "Treasure Hunt."¹ This game is arranged in order of diffi-

¹Personal interview with Mr. Waite, June, 1946.

culty and sex. Sex, meaning, that there are slips for boys on which are listed guns, swords, and pistols, while for girls there is likely to be listed a greater number of dolls, dresses, and household implements.

There are no games for children below junior high school level.

Following are several of the lists for boys and girls of junior and senior high school ages.

B1 is a game for boys of seventh and eight grade level.

G1 is a game for girls of " " " " "

H1 & 2 are games for boys or girls of high school level.

There children view the different cases looking for the objects listed on the slip. When the article named on the slip is located, the case number is written in the space provided on the sheet. Each sheet contains a list of twenty objects.

G1
(Girls 7 - 8 Grade Level)

Case No.

- | | |
|----|----------------------------------|
| 2 | A group of teasels |
| 3 | Salisbury family doll house |
| 5 | Some carded wool |
| 7 | An early washing machine of 1863 |
| 11 | A butter mold |
| 12 | Candle snuffers |

B - 1
(Boys 7 - 8 Grade Level)

Case No.

- | | |
|----|----------------------------------|
| 1 | Abel Scott's powder horn of 1775 |
| 8 | Several antique bleeding knives. |
| 9 | An old flint and steel |
| 10 | Two old ox yokes |
| 15 | An early pewter ash tray |
| 20 | The drum of Bunker Hill |

H - 1
(Boys or Girls - High School Level)

Case No.

- | | |
|----|-----------------------------------|
| 2 | Old whaling harpoons |
| 3 | Model of Washington's stage coach |
| 4 | Old fire buckets |
| 5 | An antique bear trap |
| 13 | An old Dutch oven |
| 14 | Three Colonial brass knockers |

H - 2
(Boys or Girls - High School Level)

- | | |
|----|---|
| 5 | An old doctor's medicine case |
| 6 | Elder Brewster's mortar and pestle, 1620 |
| 7 | Shingle and nails from Isaiah Thomas' house |
| 8 | Early types of spectacles |
| 10 | Colonial homespun linen napkins |
| 13 | A pair of hand-dipped candles |

CHAPTER VI

CONCLUSIONS

According to the State of Massachusetts Census figures for 1945, the population for Worcester, Massachusetts was approximately two hundred thousand persons. Of this number a total of 140,537 persons, or 70 per cent, were museum visitors for the period of one year through 1944 and 1945. This would indicate that a favorable response was made to museum activities. In spite of this fact the writer feels these figures are high, since they do not represent an initial visit, but include the weekly or periodic visits made by the same individuals.

A questionnaire concerning museum visits sent to school pupils or the adult population of Worcester would undoubtedly reveal that there are still a great number of Worcester adults and children who have yet to make a single visit to any one of its seven museums.

The Worcester Natural History Society and the Worcester Art Museum keep an accurate record of attendance. These museums had the greatest number of adult and children visitors during 1944 and 1945, and this, no doubt, was attributable to the fact that these museums had planned activities that were well publicized in the local newspaper.

A great number of adults attend the museums' classes, lectures, clubs, fine arts or educational films, exhibits, and concerts; others take advantage of the facilities offered in the libraries to further their studies or to do research work; and many call upon them for information or advice in the particular field in which the museum specializes. Yet these people represent only a small part of the total number who use the educational facilities within easy reach.

These two museums also cooperate with public and private schools, libraries, churches, and other organizations by offering loan materials that correlate with their programs or courses of study. These loan collections consist of objects, books, slides, photographs, music records, specimens, and models with suggestions for their use. In this way the museum reaches some individuals who would not otherwise have an opportunity to come in contact with museum collections. The writer found that during the year 1944-1945 loans from the Worcester Art Museum were circulated as follows: Ten per cent of the books and pamphlets; 8 per cent of the photographs and color prints; 44 per cent of the lantern slides; and 88 per cent of the music records which were restricted to schools and study groups.

This does not represent a large circulation when considering that there are sixty-four public elementary and second-

ary schools, two private schools, twenty-one parochial schools, five colleges and universities, besides libraries, churches, and other organizations in the City of Worcester. The writer feels that the museum facilities are not known to the greatest number of these institutions, and until they are, the museum cannot serve in its maximum capacity. Since the greatest demand during 1944 and 1945 was for music records than for any other loan it would behoove the museum to build up a greater music library and to offer these loans to institutions other than schools and study groups.

Teachers are always on the lookout for visual materials that are free of advertising. Out of sixty-four public, and the twenty-one parochial schools in the City of Worcester, only twenty-nine schools used the Worcester Natural History Society's loan service during 1944-1945. Approximately four hundred loans were made in these twenty-nine schools which would indicate that changes of loans here were very frequent and that teachers in these buildings were well acquainted with the loan service materials that were available. Since teachers know what, out of the museum's loans can be of most use to them, any available museum service should be advertised widely in all the schools. If twenty-nine schools can find so much use for the loans, it is the duty of the museum to find why the other fifty-six have not taken advantage of this service.

Educational work at the American Antiquarian Society is limited to students seeking higher degrees and to persons doing historical research work.

Students of Worcester colleges and universities are not encouraged to use the facilities of the society's library since it is felt that materials for their needs are available at the public, college, or university libraries. Lectures are restricted to members of the American Antiquarian Society, and in the two meetings held each year many worthwhile lectures are given on historical subjects by prominent historians.

Adults, including college and university students, and teachers interested in subjects pertaining to history would derive much benefit from listening to these speakers.

The Industrial Museums of Worcester should endeavor to display the materials that illustrate industrial processes so that the foundations of our present day life may be understood and so become an element in our culture of today. Static and mechanical models with simple directions for their operations proved fascinating to adults and children alike at fairs, expositions, and industrial exhibitions. If the Industrial Museums in Worcester aim to give information to the people concerning their industries, and to preserve the objects which helped in their development, then it would seem a step forward to set up programs of this type; to offer lectures; films; and to provide loans designed especially for schools in the city.

At the present time the Worcester Historical Society's wealth of material is little more than a collection of objects on display. The Society should attempt to improve its displays; reorganize its exhibits by adopting period settings; and develop educational work among children and adults. A few of the leading historical museums of the country increased attendance by developing installations which included miniature groups and period rooms.

In order to carry out the primary purposes for which most of the Worcester Museums were founded; namely, the education of the people, the writer suggests:

1. That museums offer diversified programs to fit the needs of the greatest number of adults and children.
2. That provisions be made for keeping the museum open during some evenings so that employed adults might have an opportunity to participate in the museum's educational activities.
3. That museums cooperate with the schools by assisting teachers with the preparation of courses of study to be used with museum collections.
4. That a library of films of educational value be developed, and made available for distribution to schools and other organizations for a small rental fee, if necessary, as other museums have done, successfully.

5. That schools, libraries, and organizations be provided with catalogs of loan materials.
6. That collections be arranged and exhibited to the best advantage.
7. That the facilities of the radio be used more extensively in order to reach a greater number of persons who are still indifferent to the educational values that museums can provide. (The Worcester Natural History Society has been carrying on a program of nature broadcasts successfully over a period of years.)
8. That museum and school officials work together in studying the interests and needs of children and teachers.
9. That questionnaires be sent out occasionally to find what new types of activities might be added to the museum's program.

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